November-December 1997

PROGRAM MANAGER

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Dan Czelusniak — Pentagon's Director, Acquisition Program Integration

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Cover: Dan Czelusniak, Director, Acquisition Program Integration, Office of the Under Secretary of Defense (Acquisition and Technology).

Some photos appearing in this publication may be digitally enhanced.

News/Press Releases

DoD Launches New Communications Effort • DoD Announces FY98 FCT Program • Small Business Innovative Research • Force XXI Process Spawns Possible New Acquisition Method • Distance Learning to Become "Way of Doing Business" • Glisson Returns to DLA as New Agency Director • New Federal Procurement Regulations • Winners of DoD Life Cycle Cost Reduction Award Announced • Col. Thomas Singleton, USMC, Named ACTD Manager of the Year • Acting Under Secretary of Defense R. Noel Longuemare Receives Packard Award

ALSO

Corrections

In spite of our best efforts to rewrite history, our sharp-eyed readers just wouldn't let us get away with it. On p. 46 of our September-October 1997 issue of *Program Manager*, the photo caption on the lower left contains an incorrect date. Jimmie Doolittle led the famous "Doolittle Tokyo Raiders" on a bombing attack against the Japanese on April 18, 1942. However, there's a good flip side to this error — you're reading our magazine, even the cutlines!

On p. 125, the 1st paragraph of the 3rd column contains an inaccurate statement beginning in the 2nd sentence. The sentence should read, "For example, the Navy began work on the F-14 as early as 1961; the Army, the M1 Tank in 1969; and the Air Force, the Stealth Fighter in 1978...."

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PM Interviews Dan Czelusniak, USD(A&T)'s Director, Acquisition Program Integration

"Be Prepared to Compromise"

O n August 22, 1997, DSMC Executive-in-Residence John Hickok spoke with Daniel P. Czelusniak, Director, Acquisition Program Integration, Office of the Under Secretary of Defense for Acquisition and Technology (OUSD[A&T]). Appointed to the position of Director in October 1996, Czelusniak has now served one year in the extremely tough job of integrating all defense acquisition and technology planning, programming, and budgeting process activities. Simultaneously, he manages and directs the efficient functioning of the Department's formal weapons systems acquisition process and the application of its program performance management tools.

Unofficially labeled the USD(A&T)'s Chief of Staff, Czelusniak also oversees OUSD(A&T) congressional activities, including establishing coordinated Departmental positions on defense acquisition and technology issues.

DANIEL P. CZELUSNIAK (LEFT), DIRECTOR, ACQUISITION PROGRAM INTEGRATION, OUSD(A&T), IS INTERVIEWED IN HIS PENTAGON OFFICE BY DSMC EXECUTIVE-IN-RESIDENCE JOHN HICKOK ON AUGUST 22, 1997.

With so many people, programs, policies, and other facets of the acquisition community clamoring for his attention at a time when the rules are changing daily, Czelusniak is a key player in the Department's efforts to institutionalize acquisition reform. In this interview, he talks about that role, program stability and the recent "Kaminski Initiative," Congress and the USD(A&T), and OUSD(A&T)'s automation initiatives. Of particular interest to program managers, he also gives us an insider's view into the PPBS process.

Program Manager: Some of our readers are probably wondering what the Director, Acquisition Program Integration does. The title is somewhat vague. Initially, it appears you're the man holding the purse strings, but that's wholly inadequate to describe the tremendous range of responsibilities you have. Could you give us a brief overview of the major areas you manage for the Under Secretary of Defense (Acquisition and Technology)?

Czelusniak: The Director is responsible for ensuring that the efforts of the OUSD(A&T) organization are integrated and directed toward achieving the objectives and responsibilities of the Under Secretary. That includes seven major areas of focus:

• developing defense acquisition policy and governing the operation of the defense acquisition process;

• promoting earned value management of defense programs, and measuring and assessing program performance;

- directing OUSD(A&T) action and participation in all phases of the Planning, Programming, and Budgeting System [PPBS] process, including long-range programmatic projections;

- managing OUSD(A&T) fiscal resources;

- guiding defense acquisition and technology congressional activities, including strategic planning, legislative proposal development, committee testimony, and reporting;

- managing OUSD(A&T) management information systems development and operation, and providing the automation infrastructure to meet OUSD(A&T) customer needs; and

- developing OSD [Office of the Secretary of Defense] policy governing contract advisory and assistance services, and managing the OSD studies program.

In addition to these stated responsibilities, the Director provides advice and counsel to the Under Secretary and Principal Deputy on cross-cutting issues demanding critical assessment and balanced perspective. It's a dynamic and challenging role. Luckily, I'm blessed with a completely dedicated and capable staff.

Program Manager: Before leaving office, Dr. Kaminski said that achieving program stability was the most important piece of unfinished business left for acquisition reform. Recently, OSD took a major step in addressing the funding instability problem by instructing the Services to set aside money, beginning in fiscal year 2000, for financial reserve accounts designed to deal with technical risk in acquisition programs, something you've referred to as the Kaminski initiative. Since you're the "point man" on the fund, can you explain how it will work?

Czelusniak: There are actually two separate aspects of the reserves that I

"It's critical for program managers to fully understand the mechanics, functional relationships, and competing objectives inherent in the PPBS. The large scope and rapidity of the process necessitates anticipating events and planning inputs accordingly."

should mention. The first deals with programming in the out years of the future year defense plan. The second deals with a pilot effort in the fiscal year 1999 budget.

Beginning in fiscal year 2000, a programming reserve of $250 million will be established for cost growth stemming from technical risk in programs. The reserve will be stepped up each year in increments of $250 million so that by fiscal year 2003, the reserve will peak and remain at $1 billion per year, thereafter. Components will initially contribute to the establishment of the reserve based on their pro rata share of total annual investment levels. OSD will begin contributing in fiscal year 2002, and by 2003 will completely fund the reserve.

The lead year reserve will be liquidated in the budget as risks present themselves in the form of cost growth in programs. For example, the fiscal year 2000 reserve will be liquidated as part of the fiscal year 2000 budget build. The remaining out-year reserves will remain unencumbered. The Service Acquisition Executives will be responsible for management and liquidation of their portions of the reserve, subject to approval by the Under Secretary of Defense for Acquisition and Technology.

Again, the reserve is intended to offset cost growth attributable to technical problems. It is not intended to offset program funding reductions resulting from overall affordability decisions, like quantity changes and taxes for other Department bills, or to pay for new operational capability. Some examples of appropriate use of the reserve are labor rate changes, and test failure corrective actions or schedule slips due to underestimation of task difficulty for which the government is liable.

Because there was a lot of concern within the Department about our ability to sustain a reserve in the budget and execution years, due to congres-

sional prerogatives, liquidation was seen as the only immediately viable approach to achieving some measure of program stability. Clearly, to be wholly effective, we would want the reserve to be maintained into the execution year. So, in fiscal year 1999, we will attempt a pilot effort to gain congressional support for the concept of budgeting risk reserves in programs.

For this effort, the Military Departments will each select three programs to serve as pilots. Reserves will be explicitly identified in the President's budget at levels that do not expose large amounts of funding. The idea will be to select programs in which a relatively small reserve provides a high degree of leverage against technical risk and uncertainty that might arise in the execution year.

There is understandable trepidation associated with exposing resources as reserves. We've had preliminary discussions with senior congressional staff and the Office of Management and Budget regarding the reserve concept, and received generally favorable responses. The main concern expressed was the manner in which the reserves will be managed.

We've had a Joint OSD and Services working group developing those management mechanics. Follow-on discussions will be scheduled with the congressional staff to present the results of the group's effort and get a sense of support for the approach before the budget is finalized. In the meantime, we are proceeding on the assumption that we share a common objective of stabilizing program funding.[1]

Program Manager: You were PEO for major Navy programs prior to becoming the Director, Acquisition Program Integration, so you've seen how the PPBS works from both perspectives.

Knowing what you know now about the PPBS process, do you have any advice for program managers on how they can better prepare for the PPBS cycle?

Czelusniak: Recognize the realities of the process. It's critical for program managers to fully understand the mechanics, functional relationships, and competing objectives inherent in the PPBS. The large scope and rapidity of the process necessitate anticipating events and planning inputs accordingly.

Timeliness is critical since opportunities for input are calendar-driven, and once a decision is made it's virtually impossible to revisit the issue. Program managers need to become acquainted, and routinely interact, with the appropriate program and budget analysts within their own Service and OSD organizations to offset this limitation. PPBS is no less personality-driven than most complex processes that require human interaction.

The interaction must occur throughout the year, not just in the heat of budget reviews. Keeping key players in the loop as programs progress provides an opportunity to both ensure the program perspective is accurately characterized throughout the Department, and remain aware of differing perspectives. Lack of understanding and awareness are typical characteristics of the process when program managers don't have communicative relationships established with the programming and budgeting communities.

Sharing knowledge is imperative to establishing trust. Program managers who hoard information ostensibly to minimize their exposure to budgetary impacts, do a disservice to their programs. In the long run, a program manager's credibility wins more debates than impassioned arguments.

My final advice is, be prepared to compromise. The competing objectives inherent in the PPBS process guarantee that even when you have a persuasive argument, those other objectives may prevail. Be prepared to trade three pigs and a goat if necessary to get the

horse. Having a strategy for compromise in advance can help you protect essential needs without risking the farm.

Program Manager: Is there anything being done either to improve the PPBS or to help program managers in the process?

Czelusniak: Before any process can be improved, it has to be understood by the parties trying to improve it. I don't dispute that the PPBS process could be improved, but we need to recognize what is wrong before changes are made. In this regard, my office has initiated an effort to examine development of a modeling and simulation tool to help identify what might be wrong with the PPBS and provide improved understanding (and thus help) to all participants in the process.

The approach is to provide meaningful, interactive training for both acquisition personnel in the intricacies and subtleties of the PPBS process (including congressional appropriations and budget execution processes), and PPBS practitioners in comprehending their impact on program execution. Through alternative role playing, participants can presumably gain insight into the procedures and interactions between the PPBS and acquisition processes, and most importantly, the motivations of the various players as they try either to produce a balanced defense budget, program for the huge diversity of future requirements, or advance their program.

Another, separate effort we have underway is to automate the process leading up to funding withhold or release decisions during the apportionment review. The current method of verifying the necessity of funding added by the Congress to various programs is time consuming and burdensome. The goal is to facilitate information sharing and processing to ensure adherence to the intent of the Congress while maintaining a suitable level of Departmental latitude to satisfy mandatory contin-

gency needs and minimize programmatic impacts.

Program Manager: What is happening in the policy arena to streamline the acquisition process? How are the overarching integrated product teams working?

Czelusniak: A lot has been done in the recent past to streamline the oversight and review process for defense acquisition programs. For example, the amount of mandatory policies and procedures has been reduced to about one-tenth of the former guidance. The sweeping policy and procedural changes of 1996 gave program managers much more flexibility and discretion in formulating acquisition strategies with tailored phases, milestones, and documentation.

Acquisition policy has also been consolidated for weapon systems and Automated Information Systems (AIS). The previously separate guidance caused program managers to have to sift through reams of information, and sort out for themselves the common and unique aspects of the applicable policy. The consolidation resulted in streamlined guidance, eliminated confusion, and improved understanding of the unique aspects of policy associated with the type of system.

One of our great success stories is the user-friendly *Defense Acquisition Deskbook* that contains not only DoD acquisition policies and procedures, but also Service-unique regulations and policies, the Defense Federal Acquisition Regulations, and special-interest items like the Year 2000 problem. The *Deskbook* is on the World Wide Web, and we distribute 20,000 copies on compact disk when new versions are released. It has enough material to fill two complete sets of the *Encyclopedia Britannica*. More importantly, the information is easily accessible through a highly effective, interactive search capability. It is revolutionizing the way we learn and practice defense acquisition. The *Deskbook* Joint Program Office team

"The sweeping policy and procedural changes of 1996 gave program managers much more flexibility and discretion in formulating acquisition strategies with tailored phases, milestones, and documentation."

deserves tons of credit for developing and maintaining this invaluable product.

We've created a standing Defense Acquisition Policy Working Group, made up of Service and OSD representatives, to keep acquisition policies current, and to continue to populate and renew the subjects covered in the *Deskbook*. The team meets biweekly and is currently working on changes to policy in the areas of the Information Technology Management Reform Act and Live-Fire Test and Evaluation. The team is also providing examples of how Cost As an Independent Variable has been successfully applied, and information on other transactions authority, and software engineering topics.

The single most important factor contributing to the success of our acquisition reform and streamlining efforts has been the use of integrated product teams. By involving key participants early and continuously, issues are surfaced sooner and resolved more quickly. A good example of the impact of integrated product teams is found in the functioning of the Defense Acquisition Board (DAB).

In 1996, after the application of integrated product teams, 16 DAB meetings were scheduled, but only three actually had to be held to get a decision. This year, we scheduled eight and needed only one. The reason truncation of the process was possible is that the integrated product teams resolved issues without a need to resort to the formality and associated administrative workload of a DAB meeting.

The most compelling evidence of the success of integrated product teams comes from our program teams themselves. In a survey of acquisition community personnel conducted this year, 77 percent reported that the use of integrated product teams resulted in an improved acquisition process with better products than the hierarchical management approach of the past. This was up from 70 percent in a simi-

lar survey last year. Clearly, the concept is here to stay as we all begin to recognize and embrace the benefits of teamwork and empowerment.

Program Manager: Since you have responsibility for OUSD(A&T) congressional activities, can you comment on any initiatives being undertaken with respect to the Congress on acquisition and technology issues?

Czelusniak: One of our most important responsibilities is to ensure we have a coherent explanation and justification for our acquisition and technology program each year as Congress reviews the president's budget during the annual authorization and appropriation processes. Congressional testimony is of course a big part of telling that story. This past year, OUSD(A&T) officials, from the Under Secretary on down, testified on the Hill on numerous programs and initiatives, including acquisition reform, modernization of tactical air forces, ballistic missile defense, acquisition workforce, consolidation of the defense industry, and logistics reform.

In addition to coordinating testimony before congressional committees, we meet with key members and staff throughout the year to discuss important acquisition and technology issues. We are also working on systemic improvements in how we relate to Congress. These improvements focus on legislative proposals and communications.

Each year, the Department submits a program of legislative proposals to the Congress to amend or repeal existing statutes, or write new statutes, to improve defense acquisition and technology. To enhance the quality of our acquisition and technology legislative program, we recently established an improved process for developing proposals. This new process has two main elements.

The first is a strong emphasis on teamwork. Too often in the past, the acquisition and technology community at large, including OSD and the Services, has not come together on issues of common interest to formulate integrated legislative solutions. The result has sometimes been a set of overlapping or even contradictory proposals. Needless to say, such proposals do not stand a good chance of success on the Hill.

The second element is early coordination. When Congress convenes in January, we need to be ready with a fully coordinated, integrated package. Unfortunately, this has not always been the case. To remedy that, we have already begun coordination for the fiscal year 1999 legislative program. We are optimistic that early and full coordination will resolve contentious issues and galvanize the entire community around a strong set of proposals.

The other initiative I'd like to mention is related to external communications. We are engaged in a new strategic planning effort, which includes the Services, to enhance how we communicate our acquisition and technology goals in order to effect desired outcomes. Since Congress is a major component of our external environment, this planning necessarily includes the Hill, but it is really being pursued as a much broader effort, targeting all elements of our external environment, including Congress, the defense industry, other federal agencies, international allies, and the public.

The Under Secretary for Acquisition and Technology presides over a vast collection of activities, everything from developing a new Joint Strike Fighter to improving military housing. With such an extensive breadth of responsibility, it's easy to default to a reactive mode as issues bubble-up to the surface. Our strategic planning initiative is aimed at becoming more proactive in shaping the environment to facilitate achievement of key acquisition and technology objectives.

Program Manager: Secretary Cohen recently released his Acquisition Year 2000 Goals. One of those goals was to "create a world-class learning organization by offering 40 or more hours annually of continuing education and training to the DoD acquisition workforce." Your office has already sponsored a marvelous example of technology-based education in the Acquisition Deskbook. Thanks to your staff we also have the ACQWeb site, which is already proving its worth as another fine information resource for our acquisition workforce. What other automation initiatives are you working on that will have a beneficial impact on acquisition education?

Czelusniak: First, let me say that we have a responsibility in Acquisition Program Integration to help support the formal training programs being developed by the Defense Acquisition University and its consortium schools. We plan to accomplish this by working toward three goals:

- fostering increased use of computers and the World Wide Web within the acquisition community to provide access to timely and relevant information and training;

- working with the Services to develop and support funding strategies that will ensure a coordinated, community-wide modernization of the computer and network infrastructure that supports our acquisition workforce; and

- providing technical guidance and leadership on standardizing the information management tools used within the acquisition community.

During the coming year, we will be sponsoring three major information management initiatives that will impact a large segment of the acquisition community. These initiatives include —

- enhancing *ACQWeb*, which is the current OUSD(A&T) Home Page on the World Wide Web, to allow users to participate in moderated

"chat" sessions with key acquisition officials and routinely access (download) audio and video-enabled files on key acquisition topics;

• implementing an OUSD(A&T) Intranet that will use web-browser technology to allow our acquisition workforce to access sensitive but unclassified information that is not available on the publicly accessible ACQWeb; and

• implementing desktop conferencing capabilities that will support distance collaboration and learning via the Internet.

Each of these initiatives builds upon the growing popularity of the Internet as a medium for learning. Thus, it is vitally important that all members of the acquisition workforce have access to robust desktop computers and reliable, high-speed communication links to the Internet. That is why I am committed to working with the Services on developing a coordinated funding strategy to deal with the issue of infrastructure modernization and desktop upgrades.

I would like to focus for a moment on our initiative to develop desktop conferencing capabilities. We believe this initiative has the most potential to revolutionize the way we collaborate and learn. In a nutshell, we want to provide a means for people in the acquisition community to interact with each other via the Internet on a real-time basis, using both audio and full-motion video capabilities. This would allow us to conduct electronic meetings, training sessions, and virtual integrated product team sessions.

The technology to pursue this initiative is rapidly maturing in the commercial sector. It is essential that we address this capability from an enterprise perspective, to avoid the proliferation of non-standard solutions that will result in stovepipes within the acquisition community. To that end, I have proposed the establishment of a Joint OSD and Services working group

"We need to recognize program managers as customers of the policies, procedures, and products we develop in OSD, as opposed to viewing them as compliance agents."

to plan for this capability and to oversee implementation efforts.

Program Manager: Now that you've been in this job for nearly a year, what do you see as needing emphasis in the area of program performance management?

Czelusniak: There are three things that are getting our primary attention in this area. First, the application of earned value as a management tool versus a reporting requirement needs continuing emphasis. Second, the transformation of the Defense Acquisition Executive Reporting Summary (DAES) reporting process, from a "one-way" to a "two-way" customer orientation, needs to occur. Finally, we need to develop an ability to identify and manage total ownership costs in order to optimize decision making.

Earned value began as a good idea 30 years ago but did not reach its full potential until recently because it was heretofore applied mainly as a government reporting requirement, not as a management tool. In its contemporary application, earned value management [EVM] has become a powerful mechanism for effectively integrating cost, schedule, and technical performance measurement. As such, it has become an effective risk management tool for program managers.

The key to converting earned value from a reporting burden to a management enhancement is the conduct of integrated baseline reviews [IBR]. These are reviews conducted soon after contract award, or even before in a sole-source environment, to ensure the supplier and customer have mutual understanding of contract scope, schedule, and resources, with emphasis on items expected to be high-cost or -risk. Unlike the former cost and schedule control system criteria [C/SCSC] reviews, IBRs are led by program managers and their integrated product teams. The object is to ensure an integrated plan is in place before work begins and the entire team understands how performance will be

managed and where risks lie in the program. By placing earned value information in the hands of the performing integrated product teams, we have virtually eliminated the audit-like C/SCSC reviews of the past.

A good indication of the utility of EVM is reflected by its increasing voluntary adoption by industry, including commercial applications. This trend lends itself to the single process initiative and contributes to reduced government oversight. We also have ample evidence to document the utility of EVM on defense programs. The Air Force JPATS, Army PAC-3, and Navy F/A-18E/F programs are all excellent examples of successful management using earned value.[2]

The DAES is the quarterly report prepared by ACAT I program managers to address program execution status against an Acquisition Program Baseline for cost, schedule, and performance goals, and potential problems (early warning). In the past, the process of DAES preparation and review had what I would characterize as a "one-way" customer orientation. By that, I mean the process only had value to the OSD staff and leadership as a report card on program performance. It had virtually no value to program managers as customers looking for resolution of problems identified in the DAES reports.

We are now on a course of transforming the DAES process to be "two-way" customer-oriented. We want to make the process a problem-resolution mechanism for program managers, as well as a status reporting device for OSD. For example, last November we started collecting information regarding funding-related problems from the DAES reports. The information was typically associated with future problems that would result if current funding actions or shortfalls were permitted to persist.

This is information program managers have been reporting all along. The problem is, we haven't acted on the

information to assist program managers in a solution. We are now using that information to categorize and help solve specific problems, as well as track systemic trends so future problems can be avoided. The results have been gratifying. The DAES process is being transformed to recognize program managers as customers who deserve service when they identify a need to upper management.

The last area of program performance management I want to mention deals with total ownership cost. That is, the sum of all financial resources necessary to organize, equip, operate, and sustain military forces. It's often referred to as life-cycle cost in the context of an individual system.

At the April 1997 PEO/SysCom Commanders/PM Conference, the Military Departments' senior logistics officers unanimously reaffirmed the lack of a robust cost accounting system as the single greatest impediment to controlling and managing life-cycle costs. Planning meetings were subsequently conducted to address issues relating to the control of life-cycle costs. As a result, the Secretary of Defense established a DoD Acquisition Year 2000 Goal to "define requirements and establish an implementation plan for a cost accounting system that provides routine visibility into weapon system life-cycle costs through activity-based costing and management."

We have taken the lead in Acquisition Program Integration to establish, organize, and support a multi-discipline team that will coordinate the identification of customers and total ownership cost requirements, develop near- and long-term implementation plans, and guide implementation. This will involve near-term assessment of the capability of current, activity-based costing (ABC) and other systems, like VAMOSC, to satisfy total ownership cost requirements. The effort will lead to identification and evaluation of potential pilot ABC programs, and development of an implementation

plan for a comprehensive total ownership cost accounting system.

Program Manager: We understand that government sponsorship of the Software Engineering Institute [SEI] was recently transferred from DARPA to OUSD(A&T). What is the significance of that move with respect to program managers and their responsibility for the acquisition of software-intensive systems?

Czelusniak: The SEI is a DoD Federally Funded Research and Development Center that was created in 1984. Its focus is on the transition of new and improved software engineering practices and technology to enhance the ability to build, acquire, and refresh software-intensive systems. The transfer of sponsorship from DARPA to OUSD(A&T) signals a recognition that the SEI's technology transition initiatives offer direct benefits to every program manager concerned with delivering and supporting high-quality, cost-effective, software-intensive systems.

As part of the transition of sponsorship, we conducted a review of the SEI's program of work. The review team was comprised of senior acquisition officials from the OSD and Services familiar with software engineering issues and problems. On the positive side, the review team stated strong support for many of the ongoing initiatives at the SEI, and for many of the products and tools being produced. However, on the negative side, a common observation was, "Gee, I wish I knew about these products before now."

As a result, a major initiative to get the word out on the SEI and its capabilities, with respect to program managers' needs, is now underway. I encourage program managers to investigate how SEI can help them with their software challenges. Likewise, program managers can help us by identifying contemporary problems needing the attention of this premier center of software expertise.[3]

Program Manager: Tell us about your management style and future direction for

the Office of Acquisition Program Integration.

Czelusniak: I'd like to think I'm adaptive to different situations and people. I don't believe a single management style works well in all circumstances. However, there are some constants for me. I'm a great believer in the power of teamwork, delegation of authority, and trusting people to do their jobs when you've told them your expectations, defined the boundaries they can work freely within, and equipped them with appropriate training and tools needed to perform.

The Acquisition Program Integration organization has a critical role to play in developing coherent positions on controversial, cross-cutting issues of acquisition and technology for the Under Secretary and OSD principals. We are fulfilling that role. In the future, I think we also have a role to perform in facilitating the work of DoD program managers.

Many of the initiatives I discussed earlier have that orientation and emphasis. We need to recognize program managers as customers of the policies, procedures, and products we develop in OSD, as opposed to viewing them as compliance agents. Acquisition Program Integration is uniquely positioned and committed to providing that kind of customer service in the future.

E N D N O T E S

1. For more information on "Program Stability, The Kaminski Initiative," refer to *Program Manager*, September-October 1997 issue, p. 59.

2. For more information on "Earned Value Management," refer to *Program Manager*, January-February 1997 issue, p. 58, or visit the EVM Website at **http://www.acq.osd.mil/pm**.

3. For more information on the SEI, visit their Website at **http://www.sei.cmu.edu_**.

DANIEL P. CZELUSNIAK

Director, Acquisition Program Integration
OUSD(A&T)

Daniel P. Czelusniak is the Director, Acquisition Program Integration, reporting directly to the Under Secretary of Defense for Acquisition and Technology. In this capacity, he is responsible for the integration of all defense acquisition and technology planning, programming, and budgeting process activities, as well as directing the efficient functioning of the Department's formal weapons systems acquisition process.

A native of Chicopee, Mass., Czelusniak received his B.S. in Mechanical Engineering from Northeastern University in 1968. In 1971, he joined the Naval Air Systems Command (NAVAIR) and completed the engineer/scientist development program in 1971.

From 1971 to 1977, he held a variety of project engineering positions supporting Naval helicopter and fighter aircraft propulsion system programs. In 1973, Czelusniak earned his M.B.A from The George Washington University.

From 1977 to 1983, Czelusniak served as Technical Director, and later as Assistant Division Director, Aviation Support Equipment Division, NAVAIR. In 1983, he earned a Navy Executive Management Fellowship and was awarded his M.P.A. from Harvard University one year later. Upon his return from Harvard, he was assigned as Deputy Program Manager for the LAMPS MK III and H-60 Anti-Submarine Warfare (ASW) helicopter programs, and served in that capacity until November 1987.

Subsequently, he assumed responsibility as Program Director, Air Launched Weapons and Armament Programs. His portfolio included all air-to-air missiles, aerial targets, anti-ship missiles, and strike weapons. In April 1990, Czelusniak was appointed Deputy Program Executive Officer and later Program Executive Officer for Air ASW, Assault and Special Mission programs, reporting to the Assistant Secretary of the Navy for Research, Development, and Acquisition. In this capacity, he was responsible for executive management of all Navy and Marine Corps anti-submarine and anti-surface warfare, strategic communications, training, executive transport, and amphibious assault aircraft programs.

Following a brief tour as the Deputy Director of Navy International Programs, in October 1996 he assumed his current position.

Czelusniak has been a member of the Senior Executive Service since 1987. He is a graduate of the NAVAIR Senior Executive Management Development Program, a member of the Pi Tau Sigma National Honor Fraternity of Mechanical Engineers, and a designated Civilian Materiel Professional. His many awards include the Presidential Rank Award of Meritorious Executive, the Secretary of Defense Medal for Meritorious Civilian Service, and the Navy Distinguished Civilian Service Medal.

Improving/Standardizing DoD Procurement Business Processes

ELEANOR SPECTOR

Editor's Note: The following excerpt from *Defense Issues*, published by the American Forces Information Service, presents remarks by Eleanor Spector, Director of Defense Procurement, Office of the Under Secretary of Defense (Acquisition and Technology) at the 5th Annual Dun & Bradstreet Conference, Washington, D.C., June 16, 1997.

In June 1997, Secretary of Defense William S. Cohen called for an ongoing and future "Revolution in Military Affairs" or RMA, which he believes must be accompanied by a "Revolution in the Business Practices" of DoD. Spector's remarks detail how the Office of Defense Procurement is revolutionizing its business practices and in the process, achieving its own "Revolution in Electronic Interactivity."

(This material is in the public domain and may be accessed on the Internet via the World Wide Web at **http://www.dtic.mil/defenselink/pubs/di_index.html.**)

I t is my pleasure to speak to you this morning about the state of electronic commerce. Perhaps the best way to tell you about electronic commerce is to describe how we in the defense procurement community will be making much greater use of electronic technology to conduct our business.

Standard Procurement System

As recently as the late '80s, procurement processes were generally manu-

ally intensive. There were some automated systems, but each tended to be unique to its own organization. Few performed all of the procurement functions. They involved high maintenance costs and had weak links to the finance community.

Early in the '90s, I initiated a joint Military Department and Defense Agency effort to standardize and improve procurement business processes. From 1991 to 1994, we undertook the laborious tasks of modeling the procurement process, defining our requirements for an automated system, and standardizing the data so that the system would have the broadest possible application. This was an ambitious concept. We wanted to have the same software for all DoD contracting offices to interface with other functional elements of DoD. This meant that Army, Navy, Air Force, and the Defense Agencies all had to participate in all aspects of what now came to be known as the Standard Procurement System [SPS].

By May of 1994, the modeling and requirements definition was deemed sufficiently adequate to begin testing the marketplace. We released a request for information stating that we were seeking existing commercial systems that could handle 13 basic procurement functions.

In response to this request, we had eight companies demonstrate their commercial systems. Our own user demonstrations validated the ability of the commercial systems to perform most government contracting functions.

The request for proposals was issued in October 1995. It called for a basic

contract with options for three incremental software enhancements and 10 years of support. We would use task orders for installation, integration with existing software, training and engineering support. There would be no "how to" specifications. Instead, we would have a statement of desired functions. Finally, any product would have to be year 2000-compliant and compatible with Windows™ software.

We wanted offerors to propose pricing for software licenses. These would vary with the size of the site involved. They would also propose the content of, and delivery schedule for, enhancements. We requested a commercial warranty and commercial software rights. We did not want any source code, since the government could not modify it anyway.

Phase 1
The procurement had three phases. In Phase 1, which we completed in January of 1996, we tested offerors' commercial software packages to verify their products met a technical minimum for continuation in the competition.

Phase 2
In Phase 2, completed in August of 1996, we used the Carnegie Mellon Software Engineering Institute's software capabilities methodology to evaluate the products of four offerors, tested the software to verify performance was as claimed, determined technically acceptable offers, requested price proposals and selected two offerors to continue.

Phase 3
In the final phase, we conducted user evaluations at 16 DoD contracting

activities, obtained an independent technical assessment from the national software testing laboratories, asked for updated pricing and on April 7, 1997, selected American Management Systems to deliver software, installation, training and support. Our selection criteria, in descending order, were the performance at the 16 procurement sites, the commercial enhancements and upgrades being offered, the technical and management approach for accomplishing outyear requirements, and price.
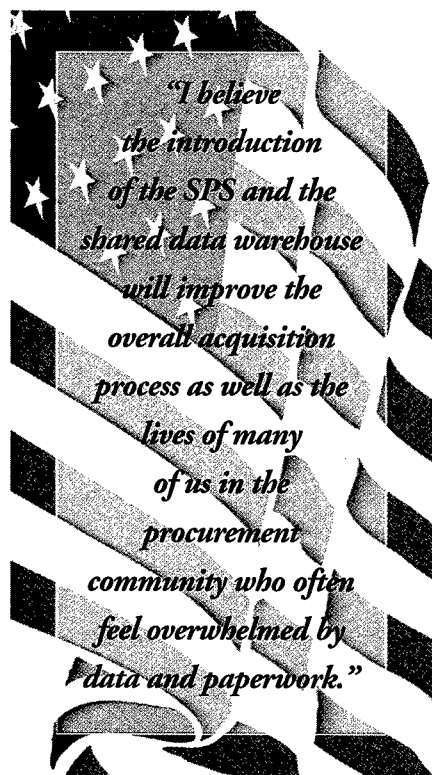
Where are we today? We have MAIS-RC [Major Automated Information System Review Council] approval to deploy to 125 contracting sites. The initial software release will accomplish about 45 percent of our procurement functions with FY [fiscal year] 98 and FY 99 releases accomplishing the remainder.

The users, who have already budgeted for local hardware and installation, will determine the order of site deployment. Generally, though, we expect to deploy first to non- or semiautomated major systems sites. We are also anxious to assist in resolving the unmatched disbursement problem through the use of SPS. In FY 97, we plan to issue orders for SPS installation at about 100 to 125 sites, covering approximately 5,000 users. By 2000, we expect installation in 900 procurement offices throughout the Department.

Shared Data Warehouse
Related to the development of SPS, a shared data warehouse is being developed by the DLA [Defense Logistics Agency] System Design Center. This will be a repository for contracting data that can be accessed by procurement and other functional elements. This warehouse will use DoD standard procurement data definitions.

The ultimate objectives of the shared data warehouse are to eliminate manual data entry, to facilitate information exchange between various elements in the acquisition process, such as the

"I believe the introduction of the SPS and the shared data warehouse will improve the overall acquisition process as well as the lives of many of us in the procurement community who often feel overwhelmed by data and paperwork."

finance and logistics offices, and to contribute to the elimination of unmatched disbursements. A prototype was established in May 1997 that stores data transmitted by 850/860 transaction sets. A functional warehouse will be fully integrated with the SPS by June 1998.

I believe the introduction of the SPS and the shared data warehouse will improve the overall acquisition process as well as the lives of many of us in the procurement community who often feel overwhelmed by data and paperwork. This is the way acquisition reform should work.

Central Contractor Registry Database
The other side of this revolution in electronic interactivity requires the contractors to be able to easily and efficiently communicate with us. To that end, we are in the process of populating the central contractor registration database, or CCR. The CCR was originally developed as a single point for contractors interested in conducting electronic data interface transactions with the government to register. As a result of the Debt Collection Improvement Act of 1996, we are now

required, for contracts resulting from solicitations issued on or after July 26, 1996, to pay contractors by electronic funds transfer, or EFT. We are also required to collect and report taxpayer identification numbers.

In order to simplify the collection of the taxpayer identification number and bank routing information for EFT payments, we concluded that using the existing CCR infrastructure would be the least disruptive to the government contracting and finance communities and would provide a single face to industry for contractors to register these data elements. Requiring contractors to register in the CCR also provides the added benefit of establishing a single database for existing automated contract writing and contract pay systems.

As we continue to improve and automate our administrative functions, the CCR will evolve as necessary to support these systems. We will use the CCR in an assortment of automated functions such as building bidders mailing lists, writing contracts, assigning contract administration functions, and in support of all aspects of electronic commerce. In time, CCR will eliminate the requirement for contractors to submit multiple Standard Forms 129, Solicitation Mailing List Application, to different contracting activities because the requisite information will reside in the central database.

Status of Mandatory Contractor CCR Registration
In early February, I signed a letter advising the acquisition community of my intention to propose regulations requiring that for awards resulting from solicitations issued after September 30, 1997, the contractor must be registered in the CCR or a contract cannot be awarded. I established an integrated product team, or IPT, to support the CCR implementation process. As we reviewed the process, it immediately became clear to me that registering in the CCR was just too difficult. We felt that the Internet registra-

ELEANOR R. SPECTOR

***Director Of Defense Procurement
Office Of The Under Secretary of Defense
(Acquisition & Technology)***

Eleanor R. Spector assumed her position as Director of Defense Procurement in March 1991. Prior to that time, she had been the Deputy Assistant Secretary of Defense for Procurement since 1985. Spector is responsible for all matters related to procurement policy in the Defense Department. This includes directing the Defense Acquisition Regulations Council and developing policy for contract pricing and financing, contract administration, international contracting, and training of contracting personnel. She is the principal advisor to the Under Secretary of Defense for Acquisition and Technology on major weapon system contracting strategies and is an advisor to the Defense Acquisition Board on procurement matters.

Spector began her career as a Navy Management Intern. She came to the Office of the Secretary of Defense in 1984 after 13 years at the Naval Air Systems Command (NAVAIR), where she was involved in all phases of airframe, radar, and missile contracting. At NAVAIR she held successive positions as contract specialist on the A-6 and F-14 aircraft; procuring contracting officer for AWG-9 Radar, Phoenix Missile, and LAMPS Helicopter; branch head for all Navy Missile Programs; and director of the Cost Analysis Division, where she supervised the development of all NAVAIR weapon systems budget estimates.

Spector was awarded the Navy Superior Civilian Service Medal in 1982; the Navy Distinguished Civilian Service Medal in 1985; the Department of Defense Medal for Meritorious Civilian Service in 1986, 1993, 1996, and 1997; the American Society for Public Administration 1987 Mid-Career Award; the Presidential Meritorious Rank Award in 1989 and 1994; the Presidential Distinguished Executive Rank Award in 1990; and the Distinguished Civilian Service Medal in 1991 and 1994.

Spector received her Bachelor of Arts in Political Science from Barnard College and has completed post graduate courses in business and public administration at The George Washington University.

Her professional activities include: National Contract Management Association Advisor and Fellow; Defense Systems Management College Board of Advisors, 1987-90; Chairman of the DoD Federal Advisory Panel on Uncompensated Overtime, 1989; Chairman of Government-Industry Advisory Panel on Rights in Technical Data, 1992-94; and Chairman of the Procurement and Contracting Functional Board, Defense Acquisition University, 1992-present.

Spector was born in New York City. She and her husband, Mel, have a daughter and son, Nancy and Ken.

tion process was too cumbersome, and we found that many of our contractors simply could not access the Internet.

We also concluded that the time lag between submission of a registration package and the completion of the registration process was too long — it has taken some companies as much as 30 days to complete the registration process.

As a result of the problems we encountered with the registration process, Dr. [John] Hamre, [then] Comptroller of the Defense Department, and I signed a letter delaying implementation of the requirement for contractors to register in the CCR as a condition for receiving a contract. We are currently assessing the schedule to improve the registration process, and we have not established a firm date for implementation of the registration policy. For planning purposes, however, the policy will not be implemented earlier than March 31, 1998.

We are taking a number of steps to improve the CCR registration process. We are developing a seed file from existing government and Dun and Bradstreet files to pre-populate the CCR database. We are revising the Web registration process and the registration form to be much more user friendly. We are working with the electronic commerce resource centers to develop outreach centers to help the smaller contractors register in CCR. Finally, we are working to significantly reduce the time it takes to register.

As soon as we analyze the steps necessary to improve the registration process, we will establish a firm date when contractors must be registered in CCR as a condition to receive a contract.

We know that CCR is a new way of doing business, and we are convinced that over time it will support automated systems that will improve our productivity.

Coming Soon —

Army's New Integrated, Digitized C² System for Medical and Tactical Commanders

MSAC - Medical Situational Awareness and Control

Suppose your next assignment places you, as an Army tactical commander, squarely in the middle of a combat zone. You're readying your unit for the fight to come. You know the probability of injuries and casualties is high. Naturally, you want every tactical and technological advantage available before you engage the enemy.
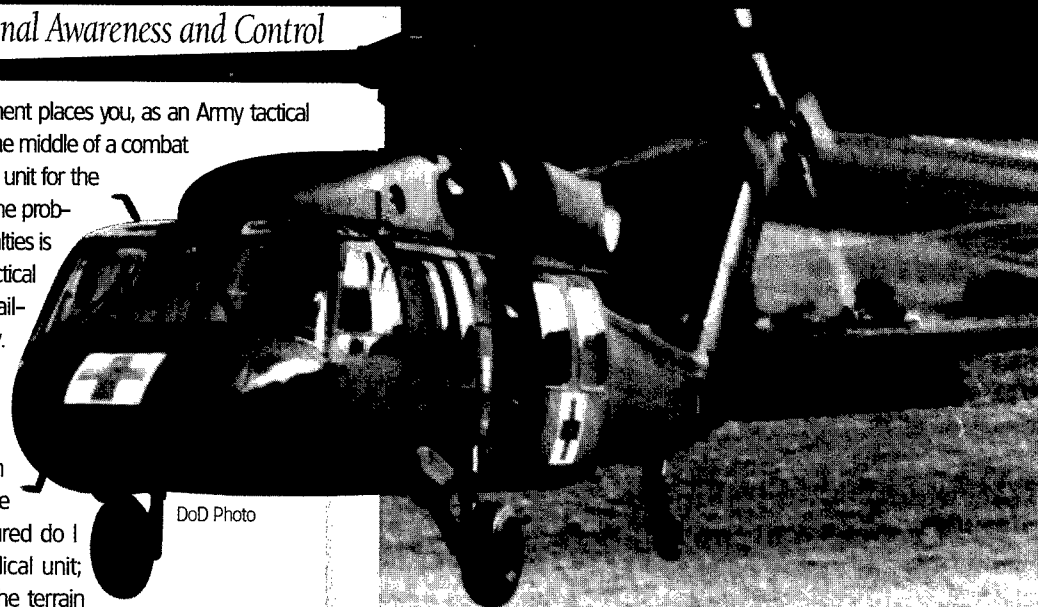
DoD Photo

But there's another consideration here. Once that warfighter you've commanded into battle suffers an injury, your focus turns to the immediate need: how many injured do I have; where is the nearest medical unit; what are its capabilities; what's the terrain like – can I get a helicopter in there; what's the best route; what kind of enemy fire might I run into? These questions and others underscore your immediate need for what tactical commanders and the modeling community refer to as medical situational awareness.

The Army is developing a non-stovepipe system, built on architecture used for command, control, and situational awareness, that is going to meet that need, ultimately giving you and your staff officers that extra level of detailed medical command and control information.

Sponsored by the Army Medical Department (AMEDD) Center and School and the Army Medical Research and Materiel Command (MRMC), the Army began work on a Medical Command and Control (MC²) prototype as early as 1994 under the direction of MRMC. Award of the contract to develop the system went to Mystech Associates, Inc., headquartered in Falls Church, Virginia.

Among its list of initial specifications, the Army directed that Mystech design a system that provides accurate medical situational awareness on the battlefield and enables commanders to control medical assets on the battlefield or during emergency operations. Such a system must concentrate on Level III (Corps) and Level IV (Theater) support, with incursions to Level II (Division), and include —

- four of the Army's 10 medical functional areas: command and control, evacuation, hospitalization, and logistics;
- a real-time picture of the battlefield – both friendly and enemy forces;
- Defense Mapping Agency Digitized Terrain and Elevation Data (DTED), Digitized Feature Analysis Data (DFAD) and ARC Digitized Raster Graphics (ADRG) Maps;
- status of medical organizations and functionalities at all levels of the battlefield, including medical treatment, logistics, evacuation, headquarters, etc.

- appropriate communications equipment, two-way voice communications, locations, and medical data from fixed and mobile assets, including the individual combat medic;
- ability to task organize medical units with the capability to divert assets to critical areas of the battlefield; and
- ability to transmit and receive tactical messages, faxes, images, and databases over military communications systems.

The Medical Situational Awareness and Control (MSAC) Workstation developed by Mystech Associates, Inc., provides an automated, deployable medical command post link to other battlefield C² systems. Medical commanders and staff will be able to obtain the same information available to supported units, and equally important, commanders and their battle staffs will be able to obtain accurate information on the status of their medical resources. Now almost completely accessible via PCs and Macs, MSAC also uses the Netscape™ browser.

Successfully demonstrated to officers, noncommissioned officers, and other potential users, written surveys conducted on-site consistently reflect a high degree of user acceptance. Exhibited at the AUSA Convention (1994, 1995, 1996); at the Joint Warfighter Interoperability Demonstration (JWID - 1996); at the Army Medical Evacuation Conference (1997); and at several training courses and seminars, Mystech conducted MSAC's key demonstration in May 1997 to the Product Manager, Combat Service Support Control System (CSSCS) and the TRADOC System Manager.

Based on their positive comments and acceptance, MSAC is currently in its next stage of development. If approved for distribution and fielding, the Army and its medical and tactical commanders will have a system that can assist not only the Army, but potentially the Joint Arena as they progress to the digitally enhanced environment of the future.

Editor's Note: MSAC is tentatively scheduled for initial distribution to selected units in late 1999.

Department of Defense Launches New Communications Effort

The Department of Defense today announced a new initiative to acquire a family of programmable, modular communications systems [PMCS] for all DoD components. The PMCS approach will replace older, hardware-intensive radios with software applications for waveform generation and processing, encryption, signal processing, and other major communications functions. The PMCS approach will support military operations across the spectrum of environments — from backpacks to ships.

The PMCS program will be operated by a joint-Service office, located in the Washington, D.C. area. Acting Under Secretary of Defense (Acquisition and Technology) Noel Longuemare has chosen the Army to be the permanent Service Acquisition Executive for the program. The Air Force will provide the first PMCS program manager, a three-year rotational position; the Army and Navy will provide deputy program managers. The Advanced Information Technology Services Office, a Joint Program Office of the Defense Advanced Research Projects Agency and the Defense Information Systems Agency, will play a critical role in developing the systems architecture for the PMCS program.

Multiple contractors will be selected to produce the PMCS products using common core software and hardware modules. According to Longuemare, "The PMCS approach represents a model for future DoD technology-intensive acquisitions."

The new program has been spearheaded by key officials of both the Joint Staff and the Office of the Secretary of Defense. Lt. Gen. Douglas D. Buchholz, Director for Command, Control, Communications, and Computers (J-6) of the Joint Staff, led the effort to validate a joint tactical radio — the military term for a programmable, modular communications system — through the Joint Requirements Oversight Council. "The JTR presents us with the opportunity to transition to a new paradigm of rapid technology insertion and fielding of communications capability for our warfighters," said Buchholz.

Acting Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (C^3I) Anthony M. Valletta formed an integrated product team to determine if a family of radios could meet the Services' various operational environments. The IPT, led by Richard M. Dyson, Director of Communications, concluded such efforts were feasible, largely as a result of rapid developments in commercial state-of-the-art open systems architecture.

"Only through a partnership with industry," Valletta stated, "can a PMCS open system architecture be developed to meet Service needs and allow use of new technology in the future."

The PMCS program should also have important applications for other federal agencies. The Federal Aviation Agency, for example, intends to use the PMCS results in defining an affordable communications suite for the general aviation community.

The PMCS program office is expected to be established in early Fiscal Year 1998.

Editor's Note: This press release is available for public consumption on the DefenseLINK News Home Page. DefenseLINK is a World Wide Web Server on the Internet (http://www.dtic.dla.mil/defenselink/).

DoD Announces FY98 Foreign Comparative Testing Program

October 7, 1997

The Department of Defense (DoD) has selected 31 projects that will be funded under the Fiscal Year (FY) 1998 Foreign Comparative Testing (FCT) Program. The FCT Program, authorized by Congress in 1989, is administered by the Director, Test, Systems Engineering, and Evaluation, Office of the Under Secretary of Defense (Acquisition and Technology).

The FCT Program tests and evaluates foreign non-developmental items from U.S. allies and other friendly nations to determine whether the equipment can satisfy U.S. Armed Forces requirements or to correct mission area shortcomings. Foreign non-developmental items offer cost-effective alternatives to new, and perhaps unnecessary, U.S. developmental efforts and reduce the time to field equipment needed by the warfighter. By evaluating foreign alternatives, FCT stimulates competition from U.S. manufacturers; however, safeguards are in place to ensure that U.S. manufacturers are not placed at any disadvantage and that U.S. industrial base issues are considered.

Foreign Comparative Testing projects are nominated annually by the U.S. Special Operations Command and the Services to the Office of the Secretary of Defense. Each proposed project is screened to ensure the item(s) is non-developmental, there is a valid requirement, a thorough market survey has been conducted, and the sponsoring organization has a viable strategy to purchase the foreign item if it tests successfully and offers best value.

Of the 31 projects selected to be funded in FY98, 11 are "new starts" and 20 are continuations of previously approved projects. Seven projects are sponsored by the U.S. Army, 11 by the U.S. Navy and Marine Corps, nine by the U.S. Air Force, and four by the U.S. Special Operations Command. A list of the FY98 projects [follows]. Additional FCT program information is available on the FCT Home Page on the World Wide Web (http://www.acq.osd.mil/te/programs/fct/).

FCT PROJECTS SELECTED FOR FY 1998

U. S. Army
*7.62MM Short Range Training Ammunition (Canada) • 120MM APERS Round for M1A1/A2 Tank (Israel) • AFOCAL Assembly (Germany, U.K.) • Anti-Riot Grenade (U.K.) • *Insensitive Munitions Hellfire Missile Motor (U.K.) • Laser/Primer Compatible Igniters (Sweden) • Scanner Assembly (Germany, U.K.)

U.S. Navy/Marine Corps
*AJU Communications Faired Mast (U.K.) • *Atmospheric Diving Suit (Newtsuit) (Canada) • *Digital Voice and Data System (Canada) • *Emergency Evacuation Hyperbaric Stretcher (Italy, U.K.) • *Mobile Torpedo Countermeasures (C303S) (Italy) • *NBC Analysis System (Denmark) • RDX/HMX Qualification (Norway, Sweden, U.K.) • *Remote Operating Vehicle Hot Tap and Pump System (Norway) • Solid State DC Reference Standard (U.K.) • Submarine Escape and Immersion Equipment (U.K.) • *Titanium Nitride Coatings for Compressor Blades (Russia)

U.S. Air Force
*Castings for Affordable Fighter Structures (Russia) • *Close Air Support/All-Up Round Warheads for JSOW and CALCM (France, Israel, U.K.) • *F-15 Countermeasures Dispenser (BOL) (Sweden) • *Micro-Satellite for Space Experiments (U.K.) • MILSTAR Rubidium Standard (Israel, Switzerland) • New Generation Heater (Denmark) • *Next Generation Small Loader (Australia, U.K.) • *Night Vision Goggle Camera System (Israel) • *Parachute Flare Pylon for F-16 (Israel)

U.S. Special Operations Command
*Joint RAAWS Ammunition Upgrade-Phase I (Sweden) • *Joint RAAWS Ammunition Upgrade-Phase II (Sweden) • *M72 Law Insensitive Rocket Motor Propellant (U.K.) • Patrol Coastal Decoy System (U.K.)

* Indicates a continuing project.

Editor's Note: This information is in the public domain on the DefenseLINK News Home Page (http://www.dtic.dla.mil/defenselink). To read more about FCT, see p. 10 of the July-August 1996 issue of *Program Manager* magazine, which includes an article by Air Force Maj. Stan VanderWerf entitled, "How to Use Foreign Comparative Testing (FCT) in Your Program." VanderWerf's article is also posted to the DSMC Home Page (http://www.dsmc.dsm.mil) under the "Publications" menu.

Small Business Innovation Research Program — A Potent DoD Resource

Harnessing the Entrepreneurial Power of Small Technology Companies

JON BARON

SOLDIERS FROM THE 101ST AIRBORNE AT FORT CAMPBELL, KY., UNLOAD BOXES OF AMMUNITION FROM THEIR C-5 GALAXY TRANSPORT PLANE ON ARRIVAL IN SAUDI ARABIA DURING OPERATION DESERT STORM. OVER HALF OF THE 40,000 CARGO CONTAINERS SHIPPED TO THE DESERT, INCLUDING $2.7 BILLION WORTH OF SPARE PARTS, WENT UNUSED, ACCORDING TO A GAO REPORT. IN THE AFTERMATH OF DESERT STORM, THE ARMY ESTIMATED THAT IF AN EFFECTIVE WAY OF TRACKING THE LOCATION AND CONTENT OF THE CARGO CONTAINERS — SUCH AS THE SAVITAG — HAD EXISTED AT THAT TIME, DOD WOULD HAVE SAVED ROUGHLY $2 BILLION.

One of the most remarkable shifts in the U.S. economy over the past 20 years has been the emergence of small technology companies – in Silicon Valley, California; along Route 128 in Massachusetts; and across the country – as a powerful engine of innovation and new technology. The Defense Department's Small Business Innovation Research (SBIR) program provides a unique opportunity for program managers to tap this potent resource for the benefit of the U.S. warfighter. Established in 1983, the SBIR program this year will fund more than $500 million in early-stage R&D projects at small technology companies – projects that serve a DoD need and have the potential for commercialization in military or private-sector markets. Program managers across DoD can participate in the program in several important ways.

Photo courtesy UPI/Corbis-Bettman

Baron works in the Pentagon, Washington, D.C., as the Program Manager, Department of Defense Small Business Innovation Research (SBIR) Program.

Small Technology Companies — A Powerful Resource for Innovation

Our nation's small technology companies are the envy of the world, and are widely regarded as one of our country's great economic resources. According to studies sponsored by the National Science Foundation and others, small businesses originate roughly two and a half times as many innovations per employee as large businesses — and also introduce a disproportionately large share of the most significant innovations. Examples include the supercomputer, the small computer, the planar integrated circuit, and the Xerox copier — all developed by companies that were small at the time (Cray, Apple, Fairchild, and Haloid, respectively).

Increasingly, the private sector is recognizing the innovative talents of small technology companies. This is evidenced by the remarkable flow of our nation's scientific and engineering talent into small technology companies in recent years. Small businesses' share of the nation's research and development (R&D) workforce has grown from 6 percent in 1978 to 18 percent in 1993, and small businesses' share of industrial R&D funding has grown from 4 percent in 1980 to 15 percent in 1993.

SBIR is an Effective Means for DoD to Tap the Small Business Resource

Comprised of eight Component SBIR programs — Army, Navy, Air Force, Ballistic Missile Defense Organization, Defense Advanced Research Projects Agency, Defense Special Weapons Agency, U.S. Special Operations Command, and Office of the Secretary of Defense — the SBIR program enables DoD to harness the talents of small technology companies for U.S. military strength. Twice a year, DoD issues an SBIR solicitation, describing the R&D needs of the eight Component programs and inviting R&D proposals from small companies. Companies compete first for a six-month Phase I award of up to $100,000 to test the scientific, technical, and commercial merit and feasibility of a particular concept. If Phase I proves successful, the company may be invited to apply for a two-year Phase II award of up to $750,000 to further develop the concept, usually to the prototype stage. Proposals are judged competitively by each Component on the basis of scientific, technical, and commercial merit. Following completion of Phase II, DoD then expects small companies to obtain funding from the private sector or non-SBIR government sources to develop the concept into a product for sale to DoD, defense contractors, and/or private sector customers.

During its 14 years of existence, SBIR has built an impressive track record of success. DoD's own careful evaluation of the SBIR program, transmitted to Congress last year by the USD(A&T) [Under Secretary of Defense (Acquisition and Technology)], Dr. Paul Kaminski, found that SBIR-funded technologies have "resulted in significant improvements in U.S. military capabilities and major savings to the taxpayer." Paul Hoeper, the Deputy Under Secretary of Defense for International and Commercial Programs, describes the SBIR program as "a major commitment by the Federal Government to harness one of the great economic resources in this country — our small technology companies." And in congressional testimony earlier this year, Robert Neal, Director of the Office of the Secretary of Defense (OSD), Office of Small and Disadvantaged Business Utilization, expressed the Department's view that "The SBIR program...[has] made a major contribution not only to the small business community in this
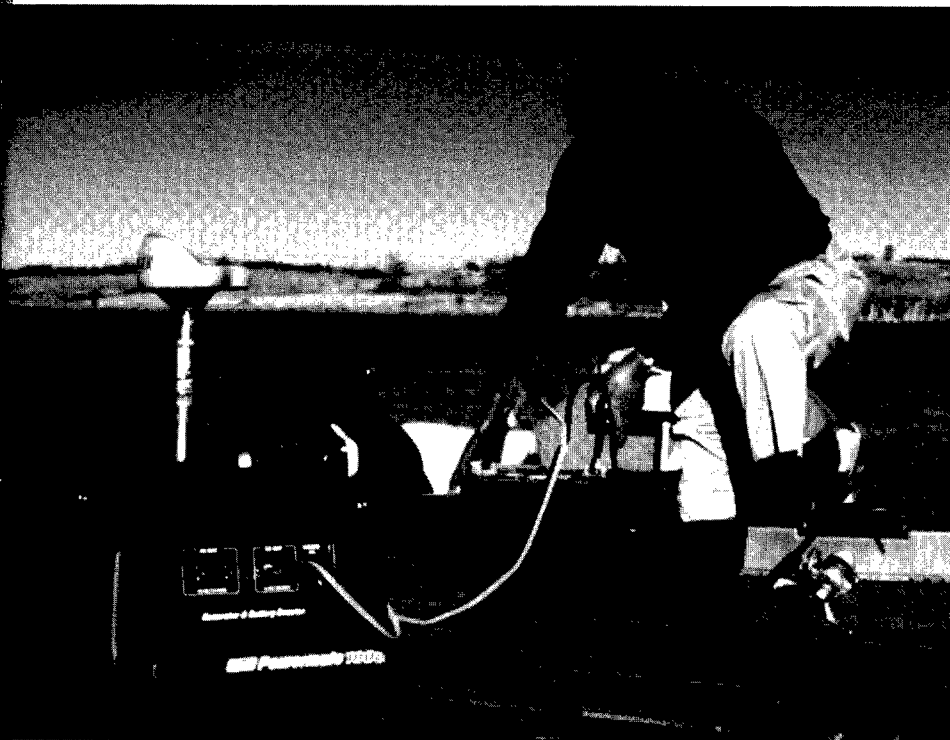
THE LIGHTNING CHARGER — AN ENGINE-DRIVEN ALTERNATOR THAT IS ONE-THIRD THE WEIGHT AND TWICE THE POWER OF COMPARABLE ALTERNATORS — IS USED FOR POWERING SUCH EQUIPMENT AS EMERGENCY LIGHTS AND REFRIGERATORS, AND TO START VEHICLES INCLUDING CARS AND AIRPLANES. GENERATING COMMERCIAL/MILITARY SALES OF $8 MILLION SINCE 1994 (AN ADDITIONAL $90 MILLION ANTICIPATED BY THE END OF 1998), LIGHTNING CHARGER IS SOLD IN MAJOR HOME APPLIANCE STORES ACROSS THE COUNTRY AND IS CURRENTLY USED BY THE ARMY TO START TANK ENGINES WHEN THE BATTERIES DIE.

Photo courtesy Active Technologies, Inc (Coleman Powermate, Inc.)

country, but more generally to the strength of the U.S. economy and of our armed forces."

For example, an SBIR-developed technology — the "SaviTag" — recently had a direct, major impact on DoD operations in Bosnia and elsewhere. Developed under the Navy SBIR program by Savi Technology, a start-up company based in Mountain View, California, located in the heart of Silicon Valley, the SaviTag is a miniature radio transceiver with an embedded microcomputer. When attached to military cargo containers, or any other crate or container used for transport, the Savitag will automatically track the container's location and contents. Developed with just $2.5 million in SBIR funding (three awards), the SaviTag is now a central element in the Department's *Total Asset Visibility* effort: *the capability of pinpointing location and content of every plane, ship, tank, and cargo container in transit around the world.* DoD awarded Savi a $71 million contract in 1994, and a $111 million contract earlier this year; the Department now uses the SaviTag in a large segment of its logistibal operations, including almost all shipments into Bosnia.

The SaviTag solves a very real problem for DoD. During Desert Storm, over half of the 40,000 cargo containers shipped to the desert, including $2.7 billion worth of spare parts, went unused, according to a GAO report. In the aftermath of Desert Storm, the Army estimated that if an effective way of tracking the location and content of the cargo containers — such as the SaviTag — had existed at that time, DoD would have saved roughly $2 billion. That is an enormous savings — far more than DoD's entire annual SBIR budget. The SaviTag has already resulted in major efficiencies in our logistical operations in Bosnia, although we don't yet have precise estimates of the savings.

As you can imagine, the SaviTag also has major applications in the private sector — particularly in the commercial trucking, rail, and shipping indus-

tries. Savi's sales to the private sector totaled approximately $6 million in 1996, and are increasing rapidly.

The SaviTag is but one of many SBIR-developed technologies, having a direct, major impact on DoD programs. Additional examples follow:

Digital System Resources. Its Commercial Off-the-Shelf-based submarine sonar processor is now being used to upgrade the sonar equipment on most Navy submarines. This processor provides 200 times the computing power of existing, military-specific processors at a fraction of the cost.

American Xtal Technology. AXT's technology for the production of Galli-

Photo courtesy Savi Technology

THE SBIR PROGRAM HAS BEEN INSTRUMENTAL IN SUPPORTING LIGHTWAVE ELECTRONICS' EFFORTS TO DEVELOP ADVANCED TECHNOLOGY AND SERVE A BROAD CUSTOMER BASE IN A VARIETY OF APPLICATION AREAS, SAYS DR. RICHARD WALLACE, VICE PRESIDENT OF ENGINEERING AT LIGHTWAVE ELECTRONICS. LIGHTWAVE HAS BEEN A LEADING INNOVATOR OF NEW SOLID-STATE LASER SYSTEMS BASED ON LASER-DIODE PUMPING. CURRENTLY USED IN A WIDE RANGE OF APPLICATIONS, LIGHTWAVE'S LASER SYSTEMS ENCOMPASS SEVERAL AREAS: BASIC RESEARCH AND DEVELOPMENT, COMMUNICATIONS, FIBER-OPTIC SENSING, SEMICONDUCTOR PROCESSING, GRAPHIC ARTS, AND MEDICAL PROCEDURES.

um Arsenide (GaAs) wafers — a critical component of many integrated circuits — reduces wafer defects by one to two orders of magnitude. On the basis of this technology, AXT has become the leading domestic manufacturer of GaAs for optical and electronic applications, with customers that include TRW, Hewlett-Packard, Lockheed Martin, and many universities and government laboratories. Commercial/military sales in 1996 were $16 million, representing 15 percent of the world market.

ParaSoft Corporation. Its software-debugging program (Insure++) is now used by most major developers of commercial software (e.g., IBM, Lotus,

Photo courtesy ViaSat Inc.

SEAKR ENGINEERING, A SMALL FAMILY-OWNED BUSINESS, IS PRIMARILY ENGAGED IN THE DEVELOPMENT, MANUFACTURE, AND SALE OF SOLID STATE MASS MEMORY SYSTEMS FOR SPACE, AEROSPACE, MILITARY, AND RUGGED APPLICATIONS. THEIR ORIGINAL SBIR AWARD IN FISCAL YEAR 1983 RESULTED IN $1.4 MILLION IN ADDITIONAL SBIR FUNDING AND $15 MILLION IN OTHER FEDERAL RESEARCH AND DEVELOPMENT FUNDING. THE FLAGSHIP OF THEIR PRODUCT LINE, EMDS (ENHANCED MEMORY DATA STORAGE) SYSTEMS, OFFERS UP TO 512 GIGABYTES OF STORAGE PER SYSTEM AND SUPPORTS UP TO EIGHT SOLID STATE RECORDERS (SSR), WITH EACH SSR OPERATING INDEPENDENTLY.
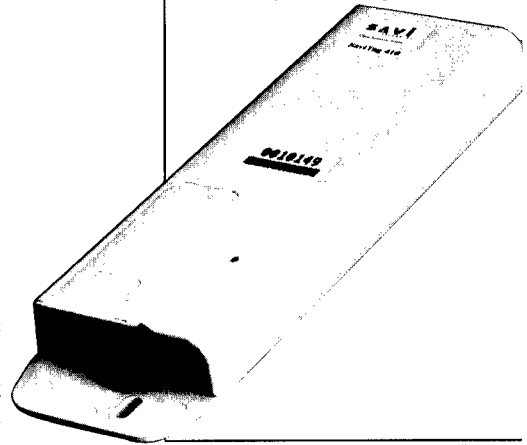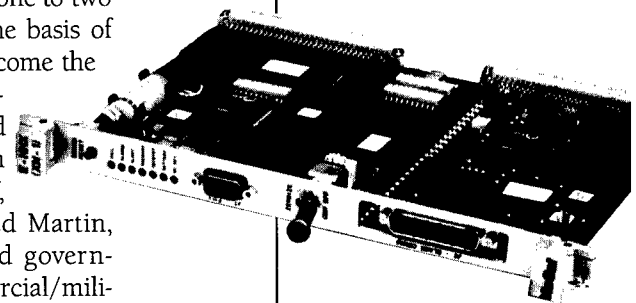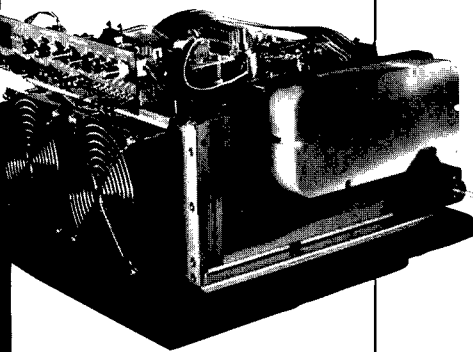
Microsoft) and organizations that develop software for in-house use (e.g., Naval Research Laboratory, Lockheed Martin, Hughes Aircraft, Boeing, Pratt-Whitney, the Internal Revenue Service, and the U.S. Postal Service). Commer-

Photo courtesy Lightwave Electronics Corporation

cial/military sales since 1993 totaled $10 million.

Integrated Systems. Its technology for the automated writing of embedded software reduced the cost and time of software development for the DC-X experimental launch vehicle by over 50 percent. Integrated Systems, which began as a start-up company under SBIR, is now publicly traded with a market valuation of $500 million.

Active Technologies. Its "Lightning Charger" — an engine-driven alternator that is one-third the weight and twice the power of comparable alternators — is used for powering such equipment as emergency lights and

refrigerators, and to start vehicles including cars and airplanes. Generating commercial/military sales of $8 million since 1994 (an additional $90 million anticipated by the end of 1998), Lightning Charger is sold in major home appliance stores across the country and is currently used by the Army to start tank engines when the batteries die.

Ophir Corporation. Its infrared-absorption hygrometer led to development of the "pilot alert" system

Photo courtesy SEAKR Engineering, Inc.

installed in all B-2 bombers, which warns the pilot if the plane is about to produce a trail of condensation that could be detected by enemy radar.

Laser Guidance. Its laser-based visual landing aid for aircraft carrier flight operations shows pilots landing aircraft at night whether they are properly lined up and how to make flight adjustments when they are not. The Navy recently awarded Laser Guidance and Raytheon a $9 million contract to install the system on the entire fleet of aircraft carriers. This technology, by increasing the rate at which planes can board the carriers, is expected to save the Navy at least $22 million per year in aircraft fuel and maintenance costs, and also to significantly reduce the risk of aircraft accidents.

Magnetic Imaging Technologies, Inc. Its latest imaging technology dramatically improves the ability of Magnetic Resonance Imaging (MRI) machines in imaging a patient's lungs, head, and heart, and represents a major advance in medical diagnosis. Whereas existing MRI machines create images based on water in the human body, this technology creates images based on gas, which produces 10 times the signal magnitude of water and improves the resolution of the MRI machine by a factor of three. As the project now enters Phase II, it has already attracted $1.5 million in equity investment from outside investors to match the DoD funding.

A number of independent studies dating back to the late 1980s have consistently affirmed the value of the SBIR program These studies include a 1996 study by the National Bureau of Economic Research at Harvard; a 1992 assessment by the National Academy of Sciences; and four separate, favorable evaluations by the General Accounting Office (GAO), in 1989, 1992, 1995, and 1997. GAO found, among other things, that the quality of SBIR research is comparable to, and in some cases exceeds, the quality of other research funded by DoD. On the basis of such evidence, in 1992 Con-

gress reauthorized and expanded the SBIR program with broad bipartisan backing, based on its finding that SBIR is "one of the most effective technology programs in the Federal Government."

Recent Improvements in the DoD SBIR Program

In 1995, a DoD-wide SBIR Process Action Team developed several major reforms in the SBIR program. These reforms, endorsed by upper-level acquisition management in OSD, the Military Departments, Defense Agencies as well as the White House, were subsequently approved by Kaminski.

By streamlining the SBIR proposal evaluation and contracting process, the reforms approved by Kaminski and enacted by Congress render the program considerably more attractive for program managers who choose to participate. For example, over the past two years, DoD reduced the time needed for proposal evaluation and contracting by nearly 40 percent in Phase I. DoD also significantly reduced the evaluation and contracting time in Phase II by 20 percent. Most DoD organizations are now close to meeting the DoD-wide goal of reducing the time between SBIR proposal receipt and award to four months in Phase I, and six months in Phase II.

In addition, the Department's new SBIR "Fast Track" policy allows DoD to leverage funding from the private sector and other sources, and further streamlines the evaluation and contracting process. Specifically, under the Fast Track policy, SBIR projects that obtain matching funds from outside investors stand a significantly higher chance of progressing to Phase II award. (Outside investors may include other companies, venture capital firms, individual investors, and non-SBIR government programs.) These projects also receive an interim award between Phases I and II, and expedited processing to ensure no significant gap in funding between the two phases. Thus, the Fast Track enables DoD to leverage outside funding to support the Department's R&D needs; focuses SBIR funding on those

projects with the strongest potential for commercialization in military or private-sector markets (as evidenced by the outside investment); and allows these projects to move into production in a timely fashion.

How Program Managers Throughout DoD Can Participate in the SBIR Program

Program managers can participate in the SBIR program in the following ways. First, if you are seeking a new technology to address a need in your program, contact the SBIR program manager for your Component to discuss how you can participate. (A complete list of Component SBIR program managers accompanies this article.) Based on your discussions, you may wish to propose an R&D topic for inclusion in the next DoD SBIR solicitation.

Second, you can search the abstracts of DoD-sponsored ongoing or recently completed SBIR projects to see if any of these projects meets a technology need in your program. The DoD SBIR Home Page (http://www.acq.osd.mil/sadbu/sbir) now posts a complete list of these abstracts. If you find an ongoing Phase I SBIR project that is of particular interest, and decide to contribute funds from your own program toward the Phase II effort, you can qualify the project for the Fast Track, as discussed earlier in this article. In effect, every $1 in program funds that you contribute may entitle you to matching funds from the SBIR program of between $1 and $4. The DoD SBIR Home Page (http://www.acq.osd.mil/sadbu/sbir) contains further information on Fast Track and matching funds.

Conclusion

Small technology companies are a powerful and growing source of innovative talent in the U.S. economy. The DoD SBIR program has proven its worth as an effective means for DoD to tap that talent for the benefit of the U.S. military. If you are interested in participating in the SBIR program, contact your Component's SBIR program manager or visit the DoD SBIR Home Page.

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Small Business Innovative Research

DoD Significantly Improves Access to SBIR Program Information

October 1, 1997

Small companies are invited to apply for a six-month Phase I award of $60,000 to $100,000 to test the scientific, technical, and commercial merit and feasibility of a particular concept. If Phase I is successful, the company may apply for a two-year Phase II award of $500,000 to $750,000 to further develop the concept, usually to the prototype stage. Details of the DoD SBIR program, including eligibility requirements, proposal preparation instructions, and sample proposals are provided on the SBIR Home Page (**http://www.acq.osd.mil/sadbu/sbir**).

Recently, DoD has significantly improved access to SBIR program information and assistance. In addition to the SBIR Home Page, the SBIR Help Desk (Commercial: 1-800-382-4634; E-Mail: **SBIRHELP@us.teltech.com**) now offers expanded information and services. Hard copies of the 98.1 solicitation are available from the Help Desk upon request.

To help small companies develop proposals responsive to the solicitation topics, topic authors are available to answer technical questions. Questions may be asked by telephone until October 1. Written questions may also be submitted anonymously on the SBIR Interactive Topic Information System (SITIS) up to 30 days before the solicitation closes. Procedures for submitting questions are discussed on the DoD SBIR Home Page.

Editor's Note: This press release is available for public consumption on the DefenseLINK News Home Page. DefenseLINK is a World Wide Web Server on the Internet (**http://www. dtic.dla.mil/defenselink/**).

Defense Industry Executives — Train With Your Government Counterparts

There's a Place for You in DSMC's Advanced Program Management Course

KARI M. PUGH

Editor's Note: In the last several issues of *Program Manager*, you may have noticed ads soliciting defense industry students for our Advanced Program Management Course (APMC). In this article, we take a different tack. Recently, we conducted a roundtable discussion with several industry students attending our APMC 97-1 course offering. Let them tell you in their own words why the DSMC educational experience is an opportunity you don't want to pass up.

Recent graduates of a premier course, conducted at the Defense Systems Management College (DSMC), Fort Belvoir, Va., returned to their careers in the defense industry with a new understanding of the acquisition/procurement arena, as seen from an industry as well as government perspective, and a clearer vision of what the future holds.

Students completing DSMC's unique flagship course, the Advanced Program Management Course (APMC) say it's the one thing those in industry need to understand new streamlined defense acquisition procedures.

The Curriculum — Adapting to Political and Legislative Change

Since the end of the Cold War, the Department of Defense has changed the way it does business with its suppliers at a rapid pace. Defense firms find themselves faced with slashed business opportunities, new legisla-

On April 18, DSMC graduated six industry students from its Advanced Program Management Course (APMC) 97-1 at a ceremony conducted in Essayons Theater, Fort Belvoir, Va. Pictured from left to right: George Krikorian, Industry Chair, DSMC Executive Institute; Michael C. Mitchell, Lockheed Martin Corporation; Robert J. Morris, Pratt & Whitney; R. Paul Normandy, The Mitre Corporation; Army Brig. Gen. Richard A. Black, DSMC Commandant; Richard L. Pasco, Jr., The Boeing Company; Louis L. Jobin III, Robbins-Gioia, Inc; Leon F. Shiflett, Sikorsky Aircraft Corporation; and George Merchant, Associate Director, Advanced Program Management Course. (Not shown—Michael J. Lombard, Pratt & Whitney)

Pugh is a police reporter for The Potomac News daily newspaper, Woodbridge, Va. She holds a B.A. in English from George Mason University.

tion passed by Congress, and even newer DoD acquisition policies and procedures.

In a 14-week curriculum based on student-led and faculty-assisted small group exercises and case studies, the APMC takes the fog out of these changes with an in-depth study of integrated systems management.

Initially, the course sets out to teach students the integration of functional disciplines into the dynamic processes

used to manage systems from the program management perspective, as well as the flexibility to reflect ongoing change in the defense acquisition world. Course eligibility presumes that students have a baseline knowledge of the Intermediate Systems Acquisition Course.

"The course was good at giving a good, overall understanding of the

"This is an opportunity that is unparalleled in terms of getting to know the people in the acquisition chain who are going to be the next generation of leaders..."

way the government does business. I think particularly with the major changes that have been happening in the last several years with reform initiatives, I think it's been a big plus," one recent graduate said in a roundtable discussion with fellow students.

During the APMC, students explore in detail defense acquisition policy, with particular study in decision-making support systems, including contractor finance, cost/schedule management, logistics support management, funds management, manufacturing management, software management, and systems engineering management.

"Overall, I think it was a very good experience. Beneficial. At least for me, personally," another graduate said. "I know a little bit more about the ins and outs of how the government actually works and goes about getting contracts out on the street...and the wickets they all have to jump through and the frustrations that they may encounter along the way to get there."

Students from every spectrum of the defense industry attend the course; invariably, they say they learned as much from each other as from the faculty.

"This is an opportunity that is unparalleled in terms of getting to know the people in the acquisition chain who are going to be the next generation of leaders," one student said. "It just seems industry is crazy not to be taking full advantage of that. We ought to have people knocking down doors to

get in here for that reason alone, as well as the technical understanding of the process that you get through readings and the curriculum and the integrated exercises."

Students who finish the course not only meet the requirements (competencies) established by the Acquisition Management Functional Board for Acquisition Category (ACAT) Level III Certification in the Program Management Career Field, but they also enhance their abilities to perform successfully in future acquisition positions.

Networking, Communication, Sharing Experiences

Graduates say the course learning environment encourages student inquiry and responds to their individual needs, plus offers the chance to network with others in the workforce.

Students from both industry and government begin the 14 weeks with little understanding of the other's viewpoint. By the end, they can not stop talking about the interaction aspect of the curriculum.

"As good as the faculty here is – the real learning takes place with the people that are out in the field now bringing their experiences to the classroom," one said. "That was probably the biggest positive impact for me, interacting with other students, industry and government." Fellow graduates agree.

"I think the interaction was one of the most positive things, between industry and government. You know, we get to hear their side of the story and they get to hear ours. You don't always get that perspective and neither do we."

Another said: "I can be a little more sympathetic to the program managers. I mean, once you understand their frustrations and what their needs are, you can...find ways to help them get their job accomplished and at the same time benefit you as well. It's a win-win type deal for everybody."

In order to emphasize the importance of developing integrated acquisition management teams in the workforce, students are organized into product/process teams, where they are expected to function during case studies and exercises.

That approach results in an unexpected benefit: enhanced communication.

"I think that, more than anything else, kind of highlights that to succeed out there in industry or government or whatever, or to have a program that's going to be a success, you've got to have people that know how to communicate with one another."

"The one thing I walked away with after going through the course work and the managerial development session was that effective communication is the key. Not just communication, but it's got to be effective."

The students praise the faculty, who are all experienced military or DoD civilians with extensive experience in defense acquisition.

"The professors here are pretty close to where the action is," one student said.

No matter what reservations or worries the students have at the beginning, they leave with a new-found respect for their counterparts.

"I guess I was a little intimidated coming here, and I leave thinking you guys aren't so bad after all," one said. "And I hope they have the same impression."

"...I had a very negative attitude about that whole discipline, that sort of touchy-feely stuff, and 'what can we do to make people feel good sort of thing,'" another added, referring to the managerial development segment of the course. "Honestly, MD was the thing I got the most out of in terms of understanding how other people address problems, how they articulate their views."

A New, Rounded View of the Acquisition Process

Since APMC is student-centered, some topics and lessons can be determined by the students themselves, if time and curriculum constraints allow. But the course work itself is unique, offering students field trips to the Aberdeen Proving Grounds Testing Center in Maryland, a GM plant, and even a brewery, where they get a real-life look at what they are learning.

"We went to a brewery and went through the whole process and found their pluses and minuses and where their problems are," a graduating student said. "It was a very good tour. A fun tour, too."

The APMC also focuses on the influence of Congress on acquisition policy and program management, even offering a chance to travel to Capitol Hill for a day.

Graduates rave about the independent study element of the program, in which students have access to the College's vast library of defense acquisition materials. Many also enjoy the Learning Resource Center, stocked with audio and video tapes that allow learning to extend beyond time spent on campus.

"You can pop a cassette in the car on the way home or take something over the weekend. I used the video cassettes a lot on the weekends. And so it just expanded your learning time."

All students say they take advantage of the extras the College provides.

"I mean, this was a lot more than 14 weeks in a sense because you can use the weekend time and travel time back and forth."

Electives on a variety of topics give students the opportunity to tailor time at DSMC to their personal and career goals.

Some students took advantage of a Wednesday morning study group

preparing for the Certified Professional Contract Manager examination administered by the National Contract Management Association.

"That was great in terms of preparing for the contracts certification," one graduate said.

Investing in the Future

Students in APMC 97-1 were eager to return to their offices armed with the new knowledge, perspective and experience, but blamed some industry executives of short-sightedness for not taking advantage of the APMC.

What is it exactly that precludes contractors from sending their mid-level managers to the course?

"Not getting any productivity out of that individual when he's gone. Not looking to the future. You know, 'What's that guy going to do for me today...forget about letting him go...'"

Students thought some employees themselves might be reluctant to leave their offices, worrying that the nameplate on the door might be different when they return.

"The industry has been in turmoil the better part of a decade as the procurement budgets have come down. There is a lot of free-floating anxiety out there, I think," one explained.

Students finishing the course, however, go back to the workforce understanding changes in the business that might take others years to learn without the class.

The graduates even agreed that the 14-week session held its own against executive development programs at prestigious colleges and universities around the country.

"I think the networking that goes on here is something that you lose [at a larger school]. And not only that, but I think the folks probably have said more than once that probably half the learning comes from you fellow students

and not from the instructors. Probably you lose that to some degree."

So how do companies benefit?

"I think...understanding the way government does business, particularly in lieu of acquisition reform, there are a lot of changes...over the last couple of years. The guys who come through this are going to [know] the new way to do business," a graduate said. "We have a more rounded view of how the acquisition process should flow and what to do to help it flow."

The APMC is truly an investment in the future in a myriad of ways. Graduates come away with in-depth knowledge of the acquisition field, new contacts in industry and government, a better understanding of their counterparts, improved communication skills, and a fresh outlook on the future of defense acquisition.

"I think it's motivating the workers who are willing to improve themselves," one student said.

When asked what he would say to industry executives considering sending employees to the APMC, one graduate answered: "I'd talk to them about the technical aspect of the process that I have a much better understanding on. You've got 14 different segments that we, even in 14 weeks, got into, [in] pretty good depth."

A fellow student noted simply: "This is the smart thing for you to be doing for the future."

That's where DSMC fills a vital need. Any defense industry executive interested in learning more about the defense acquisition management process, side-by-side with their military and government civilian counterparts, is invited to attend. DSMC waives tuition for eligible students. For APMC registration or catalog information on other courses offered at the College, contact Ruth Franklin, Council of Defense and Space Industry Associations (CODSIA) Registrar, at (202) 371-8414.

Longuemare Establishes Two Key Life Cycle Information Management Positions

To more effectively manage cutting-edge information technologies and better serve Department of Defense, industry, and general public customers, the Acting Under Secretary of Defense for Acquisition and Technology (A&T), R. Noel Longuemare, announced the establishment of a single A&T focal point for life-cycle information management processes across the A&T organization. Longuemare has designated **Michael J. Mestrovich** as the A&T Information Management Executive responsible for life-cycle information management program oversight. **Mark Adams** has been named to lead the recently created Life Cycle Information Integration Office (LCIIO).

Mestrovich is the senior executive representing A&T in all information management matters within the Pentagon and in the Department's dealings with industry. He will provide guidance and direction in the Pentagon's development of federal/industrial base interface and interoperability, electronic commerce, and integrated data environments.

In his capacity as director of the LCIIO, **Adams** will implement A&T's information management life-cycle process to take advantage of emerging technologies and more effectively focus existing computing resources and eliminate redundancies. **Mestrovich** and **Adams** will co-chair an Overarching Integrated Process Team that will take a cross-functional approach that better utilizes existing systems to provide faster and greatly improved customer service.

Editor's Note: Correspondent's Memorandum No. 142-97, August 21, 1997, DefenseLINK News Home Page (**http://www.dtic.mil/defenselink/**).

THE SQUEAKY WHEEL
GETS THE GREASE.
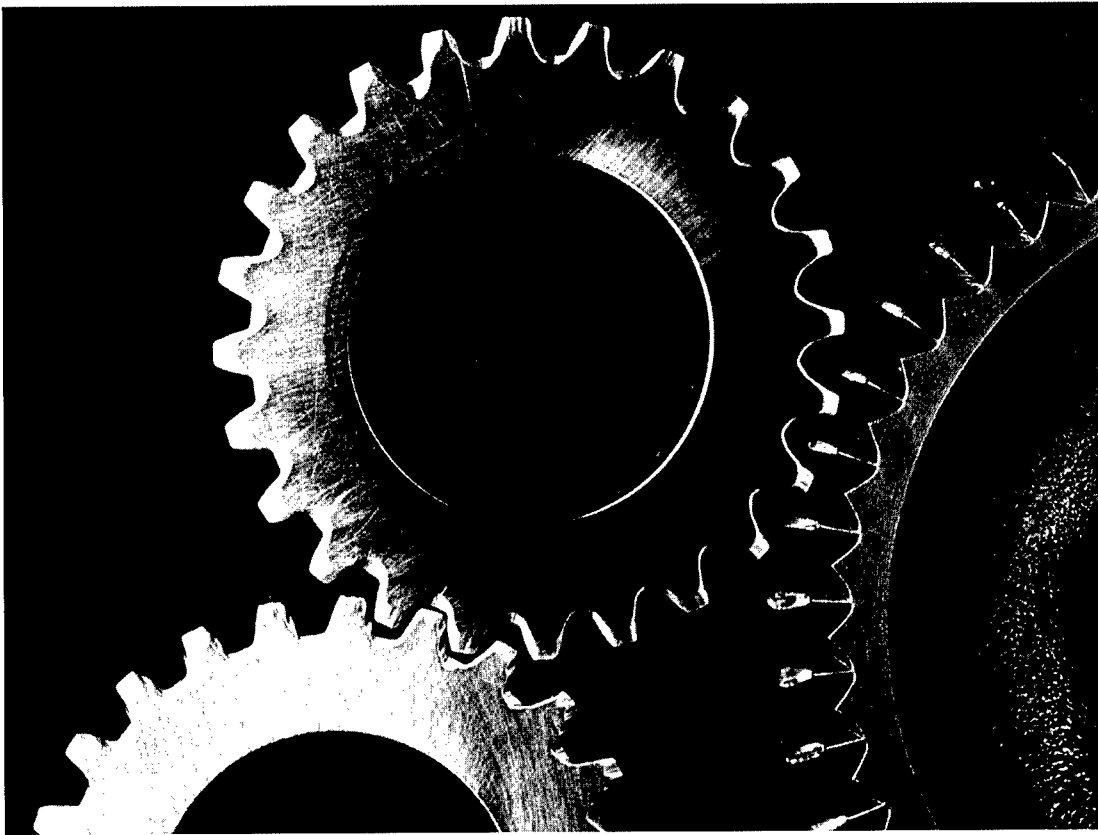
IT'S TIME TO TALK TO
YOUR TRAINING COORDINATOR
ABOUT DSMC COURSES.

Defense industry executives are invited to attend the Defense Systems Management College and learn the defense acquisition management process side-by-side with their military and government civilian counterparts. Vacancies are now available in DSMC's highly acclaimed 14-week Advanced Program Management Course at the main Fort Belvoir, Virginia, campus. Tuition is waived for eligible industry students. The next APMC class will be 8 September-12 December 1997. Contact Ruth Franklin, Registrar for the Council of Defense and Space Industry Associations (CODSIA), at (202) 371-8414 for information.

THE DEFENSE SYSTEMS MANAGEMENT COLLEGE
A MEMBER OF THE DEFENSE ACQUISITION UNIVERSITY CONSORTIUM
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I have some comments on Andy Mohler's article on COTS in your May-June issue. He presents four myths. Myth #3 is that COTS will offer huge savings. I agree that it is too soon to tell whether or not this is true. We do know that most of a program's life-cycle cost is generated in the post-development, maintenance phase. However, in examining long-term costs, Mohler makes some statements which I think require further clarification. He referred to the consolidation of vendors and suggested that a program could be left with a monopoly supplier. The consolidation of vendors has occurred in the defense contracting world, not in the commercial marketplace. The consolidation of defense contractors may or may not have an effect on the availability of COTS, depending on how much you are integrating defense or commercial products.

Mohler suggests that success or failure at integrating COTS will depend on one's ability to choose a product line with broad commercial appeal, in order to ensure long-term vendor sta-bility and product support. Popularity of a product is one factor to consider; we do not ever want to be a market of one. But perhaps more important is a product's integration into one or more widely used software architectures. We need to look at more than just products and create standards for product lines that span domains that include both DoD and commercial markets. That is the premise of the Army's SMART initiative—to standard-ize software architectural approaches across industries, including some areas of the DoD. We are hoping to create some standard architectures to provide guidance for long-term soft-ware decisions.

Mike Lombardi

U.S. Army Communications-Electronics Command Fort Monmouth, N.J.

IPTs Provide Big Payoffs For JTIDS Milestone III DAB

Joint Air Force/Army Program Goes One Step Further — "Better, Faster, Cheaper...and Smoother"

ALLAN D. HARTWELL • 1ST LT. JOSEPH E. NANCE, U.S. AIR FORCE

Recently, the Joint Tactical Information Distribution System (JTIDS) Joint Program Office (JPO) at the Electronic Systems Center (ESC), Hanscom AFB, Mass., used the new Integrated Product Team (IPT) process and latest [1995] Department of Defense Directive (DoDD) 5000 to complete Defense Acquisition Board (DAB) Milestone III *more rapidly* and at *less cost* than ever before. A Joint Air Force/Army Program, JTIDS is one of the few programs to receive two Joint Service DAB Milestone III approvals within about two years. Because we, the authors, personally worked on these two comparably complex DABs, our information is first-hand. In this article, we hope to provide *Program Manager* readers something of value in managing their own programs, based on our own unique experiences using the new acquisition procedures.

JTIDS — Getting Started

The JTIDS is a secure radio terminal that provides a joint and allied interoperable tactical digital data link for real-time distribution of air tracking and networking among air, ground, surface, and subsurface platforms. Using Link-16, the DoD-directed standard for tactical communications of all processed data for the warfighter, JTIDS falls into three basic classifications:

• The original Class 2 can be either aircraft-mounted or ground-based.

• Class 2H is a high-power version for aircraft or shipboard use.

• The Class 2M is a ground-based Army variant that supports theater air and missile defense engagement operations.

Shortly after implementation of the new DoDD 5000, ESC participated in two JTIDS DABs. The first was in March 1995 for Combined Class 2/2H Full Rate Production (FRP) and Class 2M Low Rate Initial Production (LRIP) under the previous 1991 DoDD 5000 series. The second was in April 1997 for Class 2M FRP under the new 1995 DoDD 5000.[1] The now-mandatory IPT process, along with acquisition reforms such as the Secretary of the Air Force for Acquisition (SAF/AQ) "Lighting Bolt" initiatives, proved highly successful for our program, at both the JPO and the Pentagon.

The metrics shown in Figure 1 indicate we achieved DAB approval "better, faster, cheaper...and smoother." Further, we reduced the number of Service-produced DAB documents by 59 percent, while simultaneously cutting JPO-produced documents 80 percent.

Consequently, we reduced the DAB preparation team by 77 percent and associated JPO support by 64 percent. Ultimately, our estimated cost savings for personnel, travel, and other direct costs, compared to our earlier DAB, totaled well over $1.5 million.

Once the Overarching IPT (OIPT) approved the Class 2M terminal for FRP, we became the first command, control, communications, and intelligence (C^3I) Acquisition Category (ACAT) ID program for which OSD waived both the DAB Readiness Meeting (DRM) and the DAB itself! As a result, we produced a better end product, kept the DAB on track, substantially lowered preparation costs, and smoothed the final DAB approval by all parties.

DoD Implements the IPT Process

Since the JPO completed its March 1995 DAB, DoD has implemented major changes in acquisition philosophy. In April 1995, the Under Secretary of Defense for Acquisition and Technology issued a memorandum addressing the reengineering of the acquisition oversight and review process. Specifically, he directed that ACAT I program managers begin using IPTs and that oversight and guidance of their respective programs reside at the OIPT level.

Hartwell, an Air Force Financial Management civilian, works on the Combat Information Transport System (CITS) program at Headquarters, Electronic Systems Center (ESC), Air Force Materiel Command, Hanscom AFB, Mass. He has taken numerous DSMC courses and holds dual Acquisition Professional Level III Certification in Program Management and Financial Management. Nance graduated from the Air Force Academy, Colorado Springs, Colo., in 1994 and works in ESC's Command and Control Unified Battlespace Environment (CUBE) facility.

In March 1995, OSD updated the DoDD 5000 series. The Secretary of Defense then issued a memorandum in May 1995, further expanding on the use of IPTs and promoting flexible, tailored approaches to oversight and review.

In November 1995, the Principal Deputy Under Secretary of Defense for Acquisition published the *Rules of the Road – A Guide For Leading Successful Integrated Product Teams*, which stated IPTs are to "facilitate decision making by making recommendations based on timely input from the entire team."[2] Accordingly, DoD now calls for OIPTs (upper circle, Figure 2) to focus on strategic guidance, tailoring, program assessment, and resolution of issues elevated by Integrating IPTs. Moreover, OIPTs are tailorable, drawing from a core of "11 plus" organizations, as appropriate to specific program needs.

At the next level down, Integrating IPTs plan program success by identify-

> **"...We became the first command, control, communications, and intelligence (C³I) Acquisition Category (ACAT) ID program for which OSD waived both the DAB Readiness Meeting (DRM) and the DAB itself! "**

ing opportunities for acquisition reform, program status, and then identifying and resolving program issues (middle circle, Figure 2). Program teams and system contractors form Program Office IPTs (lower circle, Figure 2) for program execution, and identification and implementation of acquisition reform.[3]

As depicted in Figure 2, IPTs are at the heart and core of the new DoDD 5000 series. Key to our success were the following six factors:

Begin Program Office DAB preparation 18-24 months before the anticipated DAB. The end user requirement for fielded terminals ultimately drove the Class 2M Milestone III DAB schedule. Using our existing JTIDS master schedule, we worked backward and determined that, to meet users' needs, our DAB should be in the March 1997 time frame to allow for a May 1997 contract award. From our experience, we recommend at least 18-24 months for a DAB. Our Program Office prepa-

JTIDS CLASS AND MILESTONE III DECISION

	2/2H FRP & 2M LRIP	2M FRP	RESULTS
APPLICABLE DoDD 5000 SERIES	1991	1995	
JOINT SERVICES	Four	Two (Air Force & Army)	
DAB ACTIVITIES			
Time Frame (DAB Kickoff to ADM)	1 Nov 93 – 1 Mar 95	1 Jun 95 – 30 May 97	
Major Milestones Deleted/Waived	1 (DAB)	3 (CAIG, DRM, & DAB)	
Final OIPT Meeting	N/A	17 Apr 97	
DAB Readiness Meeting	24 Feb 95	Waived	
DAB	Paper	Waived	
DOCUMENTS SUBMITTED			
Service-Produced	22	9	59% Reduction
Joint Program Office-Produced	20	4	80% Reduction
TOTAL	42	13	69% Reduction
PERSONNEL ASSIGNED			
DAB Preparation Team	22	5	77% Reduction
Additional JPO Support	44	16	64% Reduction
TOTAL	66	21	68% Reduction
ESTIMATED SAVINGS			
Personnel Savings			25+ Person Years
Travel Expenses			$19,000+
Other Direct Charges			$8,000+
TOTAL			$1.5 Million+ Savings

FIGURE 1. **IPT and Acquisition Reform Cost Savings — Second DAB**

ration began about 21 months before the anticipated March 1997 DAB.

At the outset, JTIDS Program Director (PD), David Carstairs established the DAB as the No. 1 JPO priority. However, this time we used a draft DoDD 5000 – and acquisition reform initiatives unfolding right before our eyes. Before OSD fully approved these new policies, the JPO adopted the draft versions to jump-start our efforts.

First, the PD assigned a DAB-experienced O-5 to oversee all DAB efforts. Next, he created two Program Office IPTs as spelled out in the new guidelines (bottom circle, Figure 2). One was the DAB Preparation IPT, headed by a DAB-seasoned O-2, which was directly responsible for the DAB itself. The other was the 2M IPT, headed by an O-4, which provided technical support for the DAB efforts, ongoing 2M contracts, data, configuration management, repair of existing 2M terminals, and eventual award of the 2M FRP contract. This IPT also worked directly with the Army to support developmental and operational testing, operational missions, field exercises, and host platform integration. Both IPTs consisted

> **"From the previous DAB, we were well aware that mindsets and cultures differ from Service to Service. Since the Class 2M was a Joint program, the Air Force and Army mutually developed a proactive stance on how to work together to minimize roadblocks and delays."**

of a mix of military, government civilian, and support contractors assigned to specific tasks, with additional functional support as necessary.

Each Program Office IPT conducted initial teambuilding sessions that helped bring everyone up-to-speed. Next, each IPT created its own charter of responsibility, accountability, and limits, providing direction without constraining flexibility to respond to changing requirements. Each task and functional support area had a primary point of contact (POC), responsible to the respective IPT Chief. Beyond this, each POC interfaced with external organizations for their respective areas.

We collocated all IPT personnel to optimize communication and coordination. As an experiment, the DAB Preparation IPT tore down its cubicle walls and transformed six cubicles into a common working area. This "open concept" optimized daily activities and facilitated rapid response to incoming task requests. Periodic offsites maintained team spirit and kept us focused. We recommend being innovative with "hands off" management.
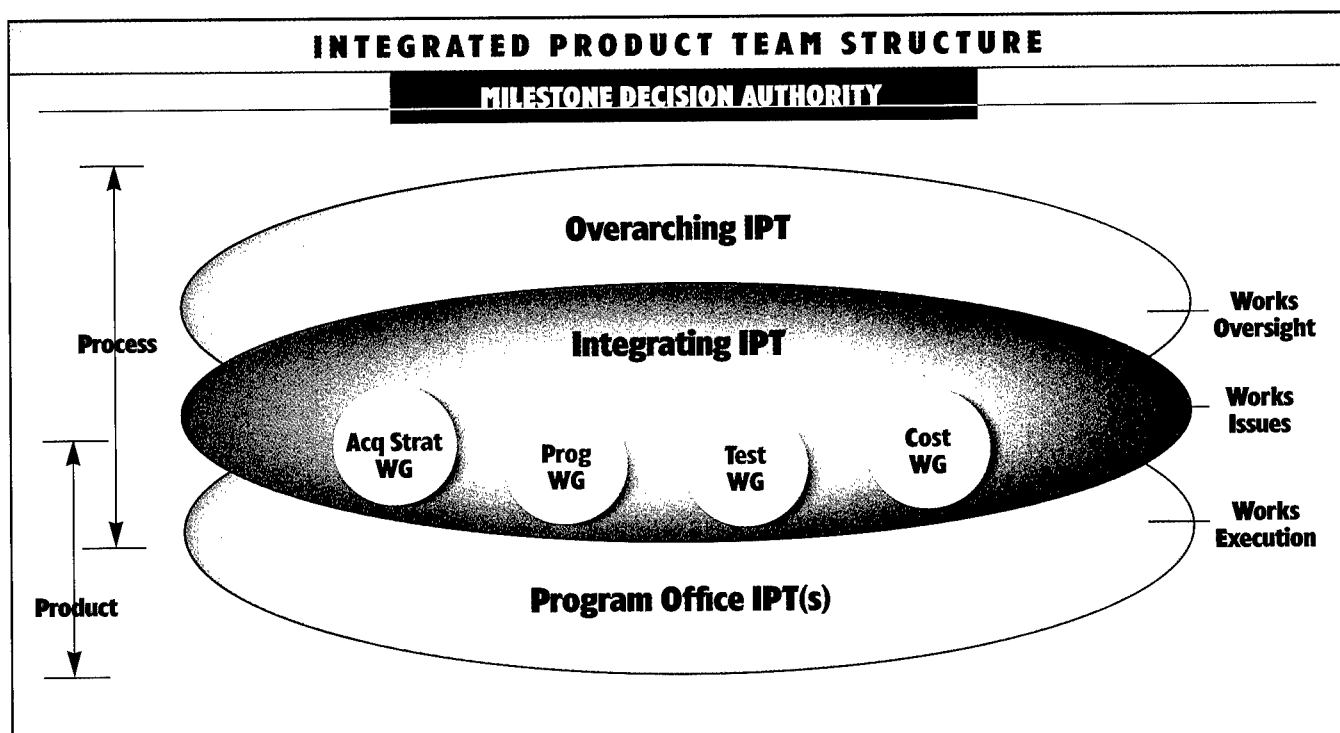

INTEGRATED PRODUCT TEAM STRUCTURE

FIGURE 2. **Organization and Roles of JTIDS 2M IPTs**

As we progressed, at the direction of the DAB Preparation IPT Chief, team members reviewed newly emerging acquisition initiatives, such as the SAF/AQ Lightning Bolts, and scoped out the changes in the draft DoDD 5000 regulatory and statutory requirements. Next, we identified Service and Pentagon functional POCs and started strategic planning efforts. Acting as our eyes and ears at the Pentagon, the Air Force JTIDS Program Element Monitor (PEM) proved invaluable throughout the DAB process. In addition, we also worked closely with the Army counterpart.

After pulling together the core organizations from the Air Force and Army, the JPO IPTs scheduled our first strategic planning session in mid-July 1995. The Army Material Developer was Program Manager-Tactical Radio Communications Systems at Fort Monmouth, N.J. Previously, this office played an integral role in identifying Army-specific terminal requirements during the 2M engineering and development phase. Using production-representative hardware, they also supported the DAB and managed developmental and operational testing.

As part of the agenda for our first session, we reviewed the latest acquisition reform initiatives and decided how to fold them into the ongoing 2M Program. Using commercially available scheduling and program management software to establish an event-driven schedule of key milestones, we identified "critical path" tasks for future detailed tracking. At the conclusion of our second strategic meeting in mid-September 1995, we solidified plans and determined that we needed no further strategic sessions. We were now ready to form the next level of IPT.

Establish an Integrating IPT around 15 months before the DAB. At the second level (middle circle, Figure 2), the new DoDD 5000 calls for the formation of an Integrating IPT with subordinate Working Level IPTs. The IPT process wisely requires that decision makers participate in the approval process earlier than in the past. Establishing this Pentagon-level IPT up front helps ensure early buy-in by all stakeholders. For our program, starting approximately 15 months before the DAB seemed about right.

The DAB Preparation IPT and Army representatives worked with key Pentagon organizations to establish the Integrating IPT. Since Class 2M is a Joint Service program, we implemented a co-chair approach with 0-6s from the Air Force and Army. In early December 1995, we held a formal kickoff at the Pentagon. From the previous DAB, we already knew many key players and organizations, so we quickly identified additional participants to ensure comprehensive representation. Ultimately, the Integrating IPT membership consisted of representatives from all four Services and OSD, and spanned over 30 organizations totaling more than 120 people.

From the previous DAB, we were well aware that mindsets and cultures differ from Service to Service. Since the Class 2M was a Joint program, the Air Force and Army mutually developed a proactive stance on how to work together to minimize roadblocks and delays. We sought to understand the complex relationship among all players and stakeholders by looking at the OSD model, versus the JPO's implementation, to clarify mutual roles and goals. Additionally, we identified potential issues early and persevered to keep them from becoming obstacles.

By regulation, the JTIDS PD assumed responsibility for execution of the program, and the Integrating IPT provided support. Serving as a single POC at the Pentagon, the Integrating IPT coordinated and resolved significant DAB-related issues. Finally, the Integrating IPT became a forum for OSD and Component oversight organizations to monitor program progress and assess readiness for the DAB.

The DAB Preparation IPT became the focal point for facilitating communica-tion among all Integrating IPT members. As such, the focal point relied extensively on electronic mail to reduce multiple telephone calls and faxes. This arrangement worked very well for routine communication, scheduling, meeting notices, minutes, action items, status messages, information requests, documentation queries, and distribution. As the team prepared documents, we kept tight configuration control to ensure consistency. Some multi-authored documents took extra effort to reach agreement.

We sought better ways to keep the Integrating IPT members informed. During the course of the DAB effort, several video teleconferences (VTC) reduced travel time and costs. Unfortunately, VTC effectiveness was somewhat limited because specific systems and support technology at different organizations were not always compatible.

Electronic mail made paperless operations practicable. We even created a website for 2M DAB status via the Internet on the World Wide Web. Expanding the existing JPO master DAB file, we also captured 2M records and electronic archives.

Use Working Groups to solidify acquisition framework/documentation. The Integrating IPT focused on program status, plans, identification and resolution of program issues, integration of various subordinate efforts, and application of opportunities for acquisition reform (i.e., innovation and streamlining). We established four primary Working Groups (WG) to support the Integrating IPT (Figure 2):

- Acquisition Strategy
- Programmatics
- Test Coordination
- Cost

We also formed a fifth WG – to obtain early consensus on DAB-deliverable documentation. Once the WG reached agreement on the Service-produced DAB documents, they disbanded, with

any open issues directed to the Programmatics WG. Figure 3 shows the focus of each WG. Co-chaired by the Air Force and Army, our WGs concentrated on DAB and related acquisition issues, then worked to resolve them at the Action Officer (AO) level. If the AO could not resolve the issues, we elevated them to the Integrating IPT.

We soon realized that many AOs at the Pentagon, assigned to support our efforts, were on other IPTs and were stretched to their limits. Often, multiple groups met at the same time, resulting in sporadic AO participation. Using electronic mail, we targeted both the organizations and individuals needed to support a given meeting. This helped participants identify meeting conflicts and set their priorities. Despite electronic meeting notices, we found it effective to call key individuals and verify they would attend .

The DAB Preparation IPT had to be proactive. Their charter was to get the right information to the right people at the right time. As more people became involved with the DAB process, this

> "The DAB Preparation IPT had to be proactive. Their charter was to get the right information to the right people at the right time. As more people became involved with the DAB process, this role grew more demanding and crucial."

role grew more demanding and crucial. Besides constantly identifying and tracking all major issues, we also worked with the PEM to keep AOs involved and up-to-date on program events. At times, AOs did not comment on documents or attend meetings. In other cases, lack of comments or participation was a vote of confidence for the DAB efforts, because the AOs had no issues or concerns to raise. Frequent Pentagon interaction was essential, and many organizations did an excellent job keeping our key players in the loop.

In addition to its regular responsibilities, the Program Office prepared a number of the deliverable documents. The 1991 DoDD 5000 called for an extensive list of DAB-deliverable documentation with a specific format, content, and approval process for each document. In contrast, the 1995 DoDD 5000 requires generalized information, and permits the Program Office to tailor the documentation submitted at each DAB milestone. The process of determining which documents to deliver start-

GROUP CO-CHAIRED BY	FOCUS
ACQUISITION STRATEGY WORKING GROUP O-5 and O-4	• Identified all of the risks associated with FRP of the Class 2M terminal • Developed an acquisition strategy which addressed and managed these risks
PROGRAMMATICS WORKING GROUP O-5 and O-4	• Defined and monitored the critical path to the DAB • Investigated ways for the IPT process to improve and streamline the DAB review process
TEST COORDINATION WORKING GROUP O-5 and O-4	• Explored methods of streamlining the flow of test result information from the testing community to the agencies preparing reports for OSD review in support of the Class 2M FRP decision
COST WORKING GROUP GS-13 and GS-12	• Facilitated cost performance trades and assisted in establishing program cost range goals • Adopted streamlining measures to minimize the cost documentation required for oversight and the DAB process
DOCUMENTATION WORKING GROUP O-5 and O-4	• Facilitated DoD approval of documentation to be prepared in support of the DAB decision • Service-Produced • Joint Program Office-Produced

FIGURE 3. **Breakout of JTIDS Product Support IPT By Working Group**

ed with the list of 44 documents prepared for the 1995 Combined DAB. As lead Service, the Air Force required some of the 44 documents for internal use; however, these were not formal DAB deliverables. Others, however, were either regulatory or statutory.

As one of the Air Force's Lightning Bolt initiatives, SAF/AQ created a new acquisition document, the "Single Acquisition Management Plan (SAMP)." This concise, integrated document replaces several existing acquisition documents. Summarizing the overall program, the SAMP identifies any relevant issues along with appropriate acquisition and management solutions. A living document, the plan is first submitted at Milestone I, and then updated at each subsequent milestone.

In the spirit of acquisition reform, we only delivered documents required by statute or regulation, and we used the SAMP to replace all others. Accordingly, our SAMP included many pages of required statutory information, but eliminated a number of otherwise separate submittals, each with its own set format. In addition, some of the other 44 previously submitted documents were still valid, while others needed updating. For example, the Risk Management Plan is a living document that must be up-to-date. Although this document was not a specific deliverable, it played an important role in the JPO's DAB preparation efforts.

Through the Integrating IPT, OSD concurred on four regulatory (R) or statutory (S) documents to be prepared by the JPO:

- Joint Test and Evaluation Master Plan (Joint TEMP) (S) (with Army Annex)

- Acquisition Program Baseline (S)

- Cost Analysis Requirements Description (R)

- SAMP (R)

A list of the five Service-produced DAB-deliverable documents follows:

- Developmental/ Operational Test and Evaluation Report (S), prepared by Operational Test and Evaluation Command;

- Multi-Service Operational Test III Report (S), prepared by Air Force Operational Test and Evaluation Command;

- Operational Requirements Document (R), prepared by the Army Training and Doctrine Command;

- Service Cost Position (R), prepared by the Army Cost Economic Analysis Center; and

- Manpower Estimate Report, prepared by the Army (S).

We used the Integrating IPT and acquisition reform to our benefit to work smarter and move through wickets faster. Early release and review of documents also proved helpful in presenting a consistent story. Using electronic mail, we distributed, commented on, and largely coordinated the Joint TEMP and SAMP among Integrating IPT members. This allowed more people to participate on "red teams" with shorter turnaround for updates and comments. Further, we required no separate Independent Cost Estimate to support the 2M cost analysis.

With the Air Force as lead Service, we consolidated the Army requirement for a separate Integrated Program Summary (IPS) into the SAMP, which met everyone's requirements. Upon approval of our acquisition strategy, we then rolled it into the SAMP.

As a result of our experiences in the area of automation, we recommend using standard word processing software compatible with the majority of Integrating IPT members. To minimize transmission and storage problems, we recommend that you keep your documents small (or break them

into smaller chunks). We avoided complex graphics (they can be real memory-hogs). Always maintain tight configuration control of documents. Limit document sign-off to key individuals, but let interested stakeholders coordinate via the IPT process.

Establish an OIPT about 12 months before the DAB. At the third or uppermost level, the new DoDD 5000 calls for the formation of an OIPT (upper circle, Figure 2). As the DAB approaches, the PD asks that an OIPT be established. The OIPT for JTIDS, chaired by the Deputy Assistant Secretary of Defense for Command, Control, Communications, and Intelligence Acquisition, included top-level managers at the Service and DoD levels. Providing the necessary oversight to our ACAT ID program, the JTIDS OIPT members focused on strategic guidance, program assessment, and issue resolution.

In mid-March 1996, we held an initial kickoff 12 months before the DAB. Although this meeting seemed premature at the time, it motivated cognizant organizations to work toward DAB approval.

Aggressively manage the DAB Process. Organizing our schedule around a few firm due-dates, we worked aggressively to meet them. In addition, we held periodic WG and Integrating IPT meetings when appropriate.

Establishing and maintaining a solid, in-place DAB Preparation IPT helped us react quickly whenever unplanned events surfaced. We used the IPTs to resolve issues and optimize communication among all participants. When naming IPT members, keep in mind that participants must be familiar with your program and demonstrate a willingness to work within the IPT framework. You want the right people to attend, empowered to speak for their organization. We carefully monitored progress of pacing critical path items (test, cost, logistics, major documents, etc.) and developed workarounds as

necessary. To save time, we instituted coordination and sign-off procedures in parallel wherever possible.

Although the SAMP requirement was new, it was a dynamic, tailorable management plan, and it quickly became a cornerstone document. Using the old IPS from the 1995 DAB, we gradually pulled our SAMP together over many months. In time, this document also fleshed out detailed issues such as risk, acquisition strategy, testing, costs, and sustainment. We recommend keeping Integrating IPT participants advised of SAMP progress by periodic draft releases as the DAB approaches.

During the previous DAB, we required additional support to meet several critical deadlines, so we temporarily assigned five key JPO employees at the Pentagon to get through the crunch. For our second DAB, the IPT process made this unnecessary, so we realized considerable cost savings in personnel and travel (Figure 1).

Keep Pentagon functionals fully involved throughout the entire process. We worked hand-in-hand with our PEM, Pentagon AOs, Joint Staff, and other Service decision makers to limit last-minute surprises. Ultimately, by getting the right people together to resolve issues and reach agreement, we found the OIPT was a superb forum for resolving key issues and facilitating DoD approvals. On two occasions, the OIPT resolved major obstacles that could have killed the 2M program. *You must always be proactive, talk constantly, and feel the pulse of advocacy.*

The PD can use the system advantageously by getting solid support from the OIPT and stakeholders. Because of our proactive stance, we progressed remarkably well. In time, OSD deleted or waived three of our major milestone events:

- Cost Analysis Improvement Group

- DAB Readiness Meeting

- DAB

Lessons Learned

The JTIDS Program is one of the few programs to successfully complete two Joint Service DABs within about two years. Through our personal experiences encountering and overcoming many hurdles during the DAB process, the DAB Preparation IPT invariably found that the IPT process was indeed flexible enough to help us resolve key issues. The measurable results?

- We received the first FRP approval for a C^3I ACAT ID program at the OIPT level with waived DRM and DAB.

- We reduced the number of Service-produced DAB documents by 59 percent (22 for LRIP versus nine for FRP).

- We cut JPO-produced documents 80 percent (from 20 to four), largely by using the SAMP to consolidate information normally covered by numerous other documents.

- Finally, we cut the DAB preparation team from 22 to five for a 77-percent reduction, and associated JPO support from 44 to 16 for a 64-percent reduction.

- In all, estimated cost savings for personnel, travel, and other direct costs were well over $1.5 million.

From our experience it takes about two years to complete a major DAB milestone. If your program is smaller, or your team has recent DAB experience, you could probably save several months.

Be innovative with "hands off" management. Take a proactive stance, empower small groups, and plow new ground. Strive for cohesion and unity. We tailored many items not essential for final DAB approval. Participants at meetings must be familiar with your program, and demonstrate a willingness to work within the IPT framework. You want the right people to attend, empowered to speak for their organization.

Program Office IPTs should be collocated to optimize communication and coordination. Consider tearing down cubicle walls to create team spirit. Also, establish a focal point for your communication efforts. Maximize electronic mail to streamline communication among all DAB players. As you prepare documents, always maintain tight configuration control to ensure consistency.

Work with your PEM and AOs to resolve concerns before they become issues that lengthen the coordination cycle. The use of proactive IPTs and open dialogue allows issues to be surfaced and resolved early in the DAB process. Details should be hammered out at the WG level. If your process works, you may be able to delete some milestones along the way — perhaps even obtain a waiver of your formal DAB.

Ultimately, insight into the use of IPTs, coupled with acquisition reform, not only enhanced the end product, but kept the DAB on track, substantially lowered preparation costs, and smoothed the final DAB approval by all parties. Our experiences and insight gleaned from working with the IPT process as an important tenet of acquisition reform enabled us to award the final JTIDS production contract on schedule, and to ensure our warfighters will get their needed Class 2M terminals on time. IPTs are a powerful testament to the success of the JTIDS program and DoD's acquisition process *because they work.*

R E F E R E N C E S
1. Cochrane, Charles, "Defense Acquisition Policy — A More Flexible Management Approach," *Program Manager,* Vol. XXV, No. 1 (July-August 1996).

2. Rules of the Road - *A Guide For Leading Successful Integrated Product Teams,* DoD, November 1995.

3. Engel, Richard, "Overarching Integrated Product Team - Working Integrated Product Team Process," *Program Manager,* Vol. XXVI, No. 1 (January-February 1997).

WHAT MAKES A SUCCESSFUL DAB?

1. Begin Program Office DAB preparation 18-24 months before anticipated DAB.
- Carefully select leaders and core team members.
- Identify Service and Pentagon functional points of contact.
- Prepare event-driven schedule and identify critical path tasks.
- Use strategic planning meetings to establish DAB foundation.

2. Establish Integrating IPT around 15 months before DAB.
- Bring together key players and ensure comprehensive representation.
- Get decision makers involved earlier and simpler than in the past.
- Goal is early buy-in by all stakeholders.
- Establish communication ground rules; optimize use of electronic mail.

3. Use Working Groups to solidify acquisition framework/documentation.
- Form working groups to focus on issues and work the details.
- Obtain early consensus on DAB-deliverable documentation.
- Specify organizations and individuals expected to support a given meeting.
- Early release and review of documents helps present a consistent story.

4. Establish OIPT about 12 months before DAB.
- Ensure that OIPT focuses on strategic guidance, program assessment, and issue resolution.
- Hold forum to get cognizant organizations working toward DAB approval.

5. Aggressively manage the DAB Process.
- Use IPTs to resolve issues as they arise and optimize communication.
- Get the right people to attend meetings, empowered to speak for their organization.
- Make the SAMP a cornerstone document; carefully monitor critical path tasks.
- Use parallel coordination and sign-off procedures to save time; be creative.

6. Keep Pentagon functionals fully involved throughout the entire process.
- Work hand-in-hand with PEM, AOs, Joint Staff, and other Service decision makers.
- Use OIPT for resolving key issues and getting DoD approvals.
- Be proactive and feel the pulse of advocacy; minimize last-minute surprises.

DAU CONVENES BOARD OF VISITORS

The Defense Acquisition University (DAU) again convened its Board of Visitors (BoV) at the DSMC main Fort Belvoir, Va., campus, on September 10, 1997. Meeting at least annually or at the call of the President, DAU, the Board's purpose is to advise the Under Secretary of Defense (Acquisition and Technology) (USD[A&T]) and the President, DAU, on "organization management, curricula, methods of instruction, facilities, and other matters of interest" to the DAU. Also serving as the BoV for DSMC, the DAU BoV responds to requests from DSMC to address issues unique to the College.

Undertaking an ambitious agenda, the Board addressed several key acquisition educational issues:

* Proposed Policy on Continuous Learning for the Acquisition Workforce Members
* DAU Continuing Acquisition Education
* DAU Acquisition Research from an Academic Perspective
* Acquisition Reform Standdown Day Feedback
* DSMC and Graduate Business School Comparison
* DSMC as a World-Class Instition
* DAU Distance Learning (DL) Initiative — Lessons Learned
* Just-in-Time Training
* The True Cost of Training
* Acquisition Education and Training Process Action Team

Chaired by Dr. Jacques Gansler, [then] Executive Vice President and Director, TASC Inc., Gansler was confirmed by the U.S. Senate as Under Secretary of Defense (Acquisition and Technology), on November 5, 1997.
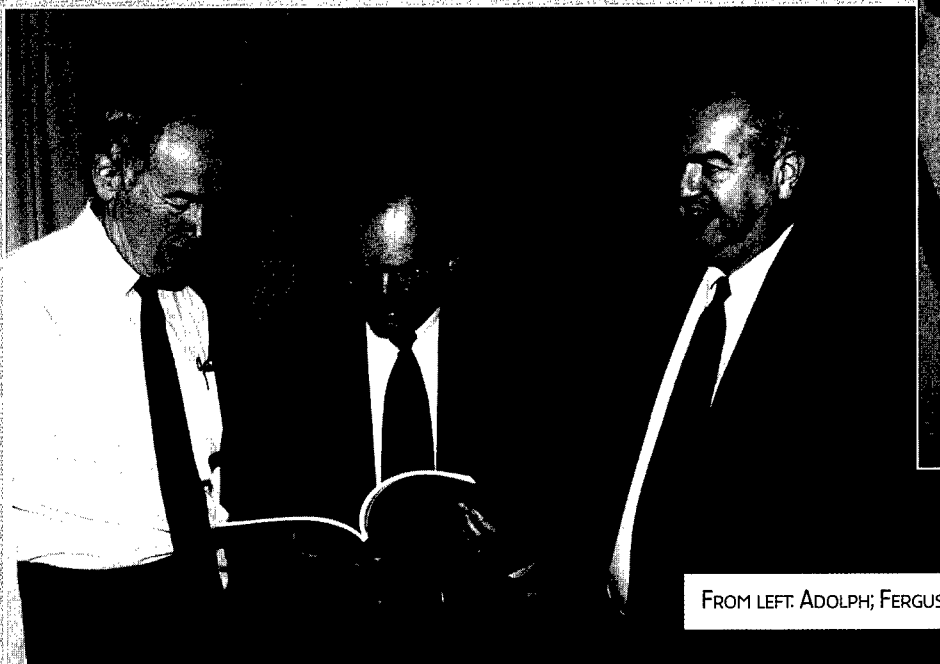
FROM LEFT: GANSLER; CREAN.

FROM LEFT: LEVI; BALDWIN.

FROM LEFT: ADOLPH; FERGUSON; MCMICHAEL.

STANDING FROM LEFT: RETIRED AIR FORCE LT. GEN. THOMAS R. FERGUSON, JR.; CHARLES E. "PETE" ADOLPH, SENIOR VICE PRESIDENT, SCIENCE APPLICATIONS INTERNATIONAL CORPORATION; DR. LIONEL V. BALDWIN, PRESIDENT, NATIONAL TECHNOLOGICAL UNIVERSITY; ERIC M. LEVI, CONSULTANT, RAYTHEON COMPANY; JAMES M. GALLAGHER, DIRECTOR, THE DAYTON GROUP; AND RETIRED ARMY BRIG. GEN. EDWARD HIRSCH, CHAIR, ACQUISITION MANAGEMENT, DSMC. SEATED FROM LEFT: THOMAS M. CREAN, PRESIDENT, DEFENSE ACQUISITION UNIVERSITY; DONNA RICHBOURG, ACTING DEPUTY UNDER SECRETARY OF DEFENSE (ACQUISITION REFORM); DR. JACQUES S. GANSLER, [THEN] EXECUTIVE VICE PRESIDENT AND DIRECTOR, TASC, INC., AND CHAIRMAN, DAU BOV (NOW CONFIRMED AS USD[A&T]); DR. GERTRUDE MCBRIDE EATON, ASSOCIATE VICE CHANCELLOR FOR ACADEMIC AFFAIRS, UNIVERSITY OF MARYLAND. ATTENDING BUT NOT PICTURED: DR. JAMES S. MCMICHAEL, DIRECTOR FOR ACQUISITION EDUCATION, TRAINING, AND CAREER DEVELOPMENT.

FROM LEFT: RICHBOURG; GANSLER; HIRSCH.

Acquisition Reform — A Good Omen or The Trojan Horse in Our Midst?

What Looks Like Efficient Competition Results in Stifling Entrepreneurial Instincts of Small- to Medium-Sized Technology Firms

DONALD L. CAMPBELL

I would like first to go on record as stating that the recent initiatives — Federal Acquisition Streamlining Act (FASA) and Federal Acquisition Reform Act (FARA) — to reform and make more efficient the federal acquisition process have, in general, been positive steps. The use of Electronic Commerce to eliminate dependence on an outmoded and inefficient paperwork process has been one of the most significant improvements. Additionally, reducing the acquisition cycle time will pay significant dividends to the taxpayers. However, I am very concerned about the significant, adverse impact of several of the core initiatives on the small- to medium-sized Information Technology (IT) community.

Are We Really Improving Competition?

The central issue deals with the premise that the recent actions to "streamline" the federal acquisition process with the enactment of the FASA and FARA have enhanced *the competitive process. However, for many small- to medium-sized technology firms, this so-called "new" competitive process is not working and if it is allowed to continue, it will result in forcing many of these innovative and creative small- to medium-sized firms out of business.*

"There is a Trojan Horse in our midst — a Trojan Horse that looks like efficient competition, but results in eliminating a large segment of the small- to medium-sized technology firms from competing."
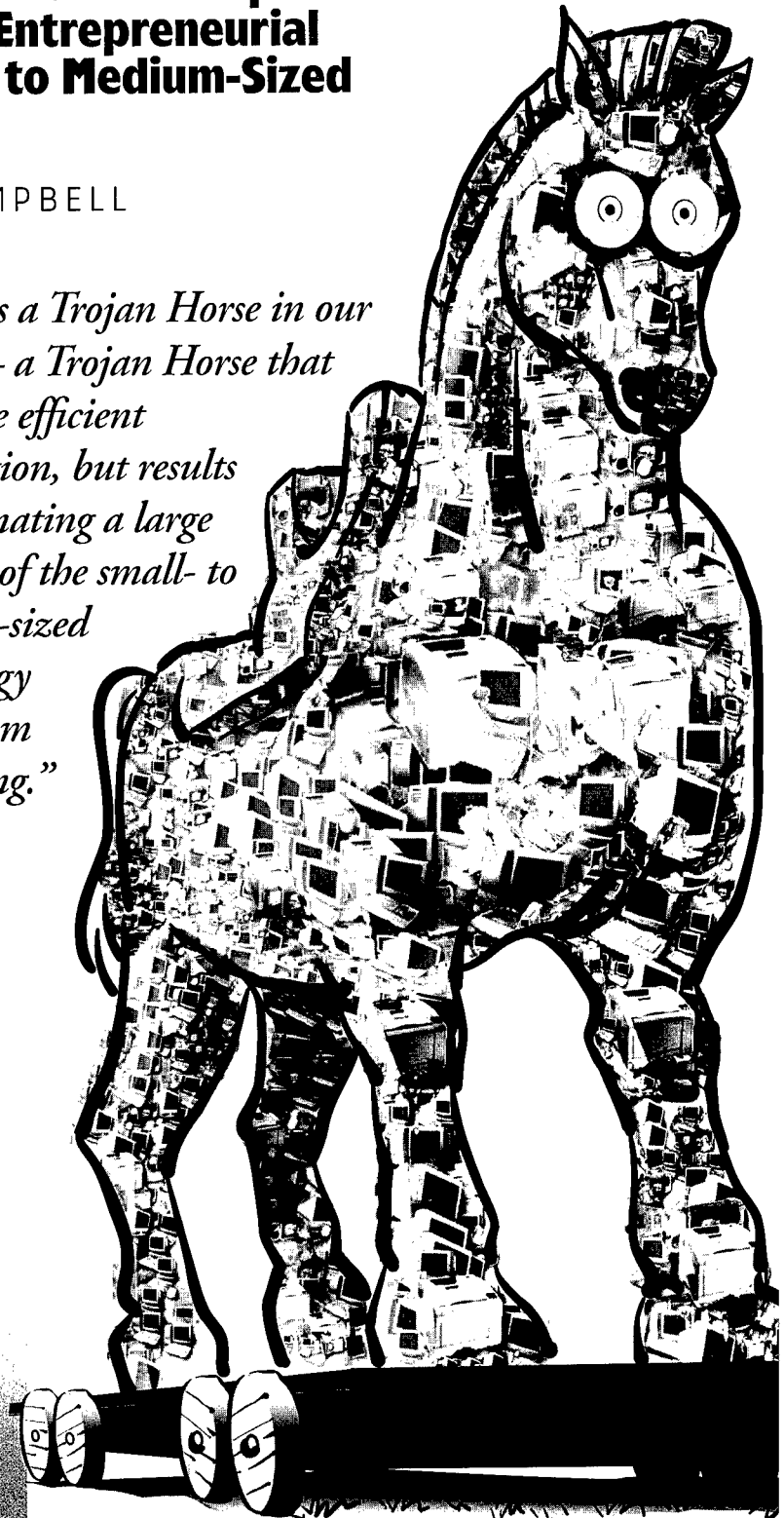
As I reflected upon the series of events that precipitated our recent acquisition reform initiatives — of which achievement is a laudable goal — my ruminating conjured up the image of The Trojan Horse, a classical Greek legend. As you will recall, the Greeks constructed a hollow horse, which came to be known as a Trojan Horse, filled it with soldiers, and left it outside the gates of Troy. The Trojans, believing that the horse was a good omen, ushered the Horse into the city, only to be attacked by the soldiers from within, thus losing the war.

It is my considered assessment that many of the small- to medium-sized firms today clearly believe that *someone has structured a Trojan Horse under the veil of "improved competition" and has, under the cover of "efficient competition," installed this Trojan Horse right at the core of the federal acquisition process.* Clearly, from the perspective of small- to medium-sized IT firms ($20 million to $120 million), there is a Trojan Horse in our midst — a Trojan Horse that looks like efficient competition, but results in eliminating a large segment of the IT business from competing.

Specifically, as I see it, there are five areas that require immediate attention if small- to medium-sized firms are to continue participating in the new federal procurement environment:

- Bundling of Procurements
- Efficient Competition Definition
- Competitive Range Assessment
- Pre-Award Briefings Limitations
- Task Order Competition Realignment

Bundling of Procurements. *First,* perhaps the single most vexing problem currently confronting small- to medium-sized IT firms is the fact that many of the *procurements are being bundled into large, billion-dollar procurements,* and as a result of this bundling exercise, only the large or mega-firms can successfully compete, given the current ground
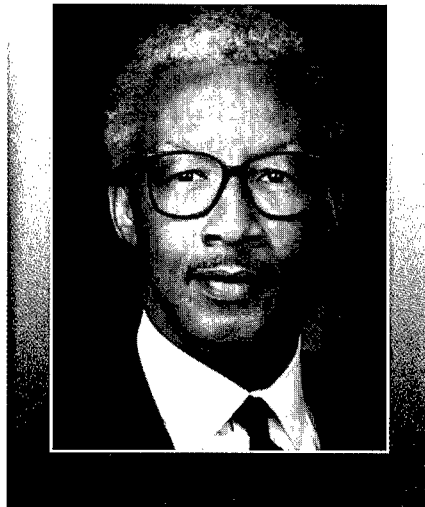

Photo courtesy Century Technologies, Inc.

DONALD L. CAMPBELL IS THE CHIEF EXECUTIVE OFFICER AND PRESIDENT OF CENTURY TECHNOLOGIES, INC. (CENTECH), SILVER SPRING, MD. A GRADUATE OF PENN STATE AND HARVARD UNIVERSITIES, CAMPBELL'S CAREER INCLUDES MILITARY SERVICE AS A COMMISSIONED OFFICER; AND TENURES AT THE DEPARTMENT OF DEFENSE, DEPARTMENT OF TRANSPORTATION, AND EXECUTIVE AND LEGISLATIVE BRANCHES OF THE U.S. CONGRESS. HE IS AN ACTIVE MEMBER OF THE DEFENSE ACQUISITION UNIVERSITY BOARD OF VISITORS.

rules. While some attention has been given to very small, mostly start-up firms in terms of set aside, the vast majority — possibly as many as 80 percent of small- to medium-sized IT firms — are being locked out of fully participating in the competitive process.

Small- to medium-sized firms should be allowed to form consortia, but there are real constraints that mitigate against the effective use of consortia under the current procurement rules.

Efficient Competition Definition. The *second* most significant issue in terms of the recent acquisition reform initiatives is in the area of *efficient competition.* I am certain that all of my colleagues would agree with me that all competition should be efficient. In fact, in my view, we should have two

levels of efficient competition, which might be defined as *"full competition"* and *"equitable competition."* I define *"full competition"* as the ability to allow any and every firm to compete. I define *"equitable competition"* as the ability of firms to compete in an equitable way among similar firms, i.e., their relative peers. It is my view that the implementation of those two levels of competition will ensure the robustness of the competitive process.

Many may argue that by allowing for full competition you, in fact, will ensure the best return for the government's dollar. I clearly would not argue against that logic; however, I would suggest that when you combine *full competition with the bundling of major procurements* resulting in multibillion dollar contracts, it is literally impossible for firms in the small- to medium-sized range to consistently and successfully compete in this fully competitive process. *I would, however, suggest that if those same firms were allowed to compete in what I call an equitable competitive process, against firms of essentially similar size and resources, the government would receive significant returns on its investments.*

Competitive Range Assessment. The *third* major issue is the concept of the *competitive range.* The competitive range is determined by a procurement official who many consider makes a subjective determination, thus limiting the number of participants in the competitive process. This limiting process clearly works to create significant barriers to entry, and thus to reduce competition. Since most of the new entries into the competitive process are, and most likely will continue to be small- to medium-sized firms or emerging firms, this limiting process represents a significant impediment for these firms to enter into the procurement process.

Any federal procurement initiative that would reduce the ability of those firms to exercise their independent business prerogatives would clearly strike at the core of this country's *competitive busi-*

ness model. The long-term impact would, in my considered judgment, significantly reduce competition, drive up the price the taxpayer might pay for critical IT products and services, and lead to the creation of oligopolies in our industry.

Pre-Award Briefings Limitations. The *fourth* issue is that of *pre-award briefings*. During a recent procurement acquisition seminar, in which I was invited to appear as a panelist, I indicated that these pre-award briefings could be positive; however, I believe that many of the briefings, in reality are "beauty shows" where those who are prepared to spend an inordinate amount of dollars on rehearsals and on presentation skills, may be victorious even though their technical and management approaches may not be superior.

Small- to medium-sized firms with very limited resources certainly could not be expected to compete against the large mega-firms in a beauty contest. This particular provision could have a detrimental effect upon the growth of the IT business base and significantly reduce competition.

Task Order Competition Realignment. The *fifth* and final major issue deals with the *structure of many of these large omnibus contracting vehicles* under the recent federal acquisition guidelines. Specifically, many of these vehicles are Indefinite Delivery Order/ Indefinite Quantity (ID/IQ)—type vehicles and require that as one identifies a delivery order opportunity, that delivery order is competed among all those firms that successfully submitted a bid for the contract.

I would strongly suggest that most of us in this business would consider this ID/IQ task order competition to be a most inefficient process. More importantly, this represents a significant problem for many small firms. These small- to medium-sized firms find themselves, as a sub, *competing three times* — once to win the contract with the prime; second, to be selected by the prime to submit their quotes on the delivery order; and third, to be selected by the end client.

Looking Beneath the Surface

As I stated earlier in this article, there are clearly many aspects of the recent acquisition reform initiatives that positively impact small- to medium-sized firms. I have, however, attempted to highlight several major problem areas

for those firms. It is my view that most small- to medium-sized firms have identified the problem issues pinpointed in this article as what I would term *a Trojan Horse* — the set of reforms that on the surface appears to be a good omen of a more open and equitable federal procurement process.

Upon further investigation of this Horse, however, one sees a set of initiatives that, in many cases mitigates against the entrepreneurial instincts and innovative drives of many small- to medium-sized firms; a set of reforms that arbitrarily excludes many of these firms from the opportunity to compete for federal dollars; a set of reforms that closes the door on many of these small- to medium-sized firms and does not allow them to compete fully or equitably.

From Where I Sit

In conclusion, *there is a Trojan Horse in our midst.* I hope that in some small way this article reveals the Trojan Horse and shares with many of *Program Manager's* readers the view of one entrepreneur — that there is more to be accomplished in acquisition reform.
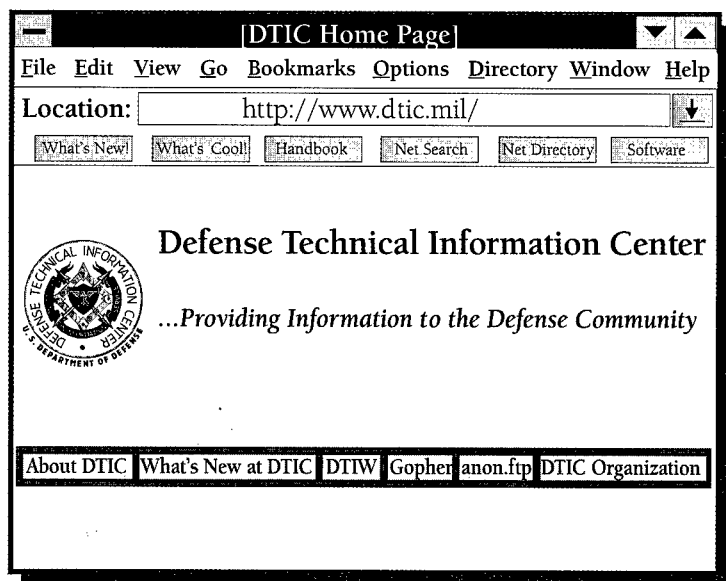

Inside DSMC

Retired Army Brig. Gen. Edward Hirsch, Provost and Deputy Commandant, became the new Chair for Acquisition Management, DSMC Executive Institute, effective October 1, 1997. Prior to becoming the Provost and Deputy Commandant in 1992, Hirsch served the College in several key positions: Member, Research Division (1984—1986); Chairman, Acquisition Enhancement (ACE) Program (1986—1989); and Director, Center for Acquisition Management Policy (1989—1992). Hirsch holds an M.A. in International Relations and Public Law from the University of Maryland. A distinguished graduate of the Naval War College, he was awarded a number of decorations during his 35-year military career, including the Army

Distinguished Service Medal. In 1990, Hirsch was awarded the Meritorious Civilian Service Award, and in 1992 received the Commandant's Award.
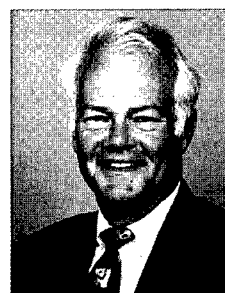
Richard H. Reed, Dean of Faculty since October 1994, became the new Provost and Deputy Commandant, effective October 1, 1997. Prior to becoming Dean of Faculty, Reed held the position of Associate Dean of Faculty from 1991 to 1994. He also served the College as Department Chair for the Systems Engineering Department from 1989 to 1991. Reed holds an M.B.A. from Central Michigan University. In 1992, he was awarded the Defense Superior Service Medal.

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Commandant Visits DSMC Eastern Regional Center

Boston—The New England Connection

RICH STILLMAN

Boston is rich with military history, and the Defense Systems Management College Eastern Regional Center is quickly becoming part of that tradition.

A Rich Military Heritage

Boston — home of the U.S.S. *Constitution*, the Lexington battlegreen, the old North Church, the bridge at Concord, and Bunker Hill — is where the American Revolution started. Patriots like John Adams and his son John Quincy Adams, Paul Revere, John Hancock, and Sam Adams all lived and died there. And that military tradition continues today with the many defense contractors and military bases spread throughout the New England states.

DSMC has been educating the acquisition workforce within close proximity to its Eastern Regional Center at Hanscom Air Force Base, 25 miles outside Boston, for the past 12 years. The College serves acquisition professionals not only at Hanscom, but also the Army's Natick Research, Development, and Engineering Center; the Defense Contract Management Command's Eastern Headquarters; and a host of defense contractors.

During a recent visit to Boston, Army Brig. Gen. Richard A. Black, DSMC Commandant, visited many of these activities and met with their key leaders as well as defense industry acquisition professionals.

Electronic Systems Center. ESC is the Eastern Regional Center's host command at Hanscom. It develops, acquires, and sustains command, con-

Stillman is the DSMC Eastern Regional Director.

THE RAYTHEON VISIT WAS AN OPPORTUNITY FOR DSMC'S COMMANDANT TO DISCUSS PLANS FOR ENROLLING MORE INDUSTRY STUDENTS IN DSMC COURSES. FROM LEFT: EUGENE STOCKTON, RAYTHEON ELECTRONIC SYSTEMS DIRECTOR FOR PRODUCT ASSURANCE; ARMY BRIG. GEN. RICHARD A. BLACK, DSMC COMMANDANT; ARMY COL. ED CERUTTI, DEFENSE CONTRACT MANAGEMENT COMMAND RAYTHEON OFFICE; WALTER PUTIS, RAYTHEON ELECTRONIC SYSTEMS, MEADS PM; AND AIR FORCE COL. SAM BROWN, DSMC DEAN OF ACADEMIC PROGRAMS.

tors, users, developers, and contractors, and also identifies system problems that require quick resolution.

OF PARTICULAR INTEREST DURING THE HANSCOM VISIT WAS A TOUR OF AN OPERATIONAL BATTLELAB — THE COMMAND AND CONTROL UNIFIED BATTLEFIELD ENVIRONMENT, KNOWN AS THE CUBE. FROM LEFT: RICH STILLMAN, DSMC EASTERN REGIONAL DIRECTOR; JOHN C. WILSON, JR., EXECUTIVE DIRECTOR, ESC. SEATED: ARMY BRIG. GEN. RICHARD A. BLACK, DSMC COMMANDANT.

Raytheon. Visiting the Bedford, Mass., facility of the Raytheon Corporation, Black was accompanied by Army Col. Ed Cerutti, Commander of the Defense Contract Management Command office at that facility (DCMC Raytheon). (At the time of the visit, Cerutti was a student in the four-week Executive Program Management Course at DSMC's main Fort Belvoir, Va., campus.)

ARMY BRIG. GEN. RICHARD A. BLACK, DSMC COMMANDANT, MEETS WITH STUDENTS AT THE EASTERN REGIONAL CENTER, HANSCOM AFB, MASS. OVER 1,000 STUDENT TRAINING WEEKS A YEAR ARE PROVIDED THERE.

trol, communications, computers, and intelligence (C⁴I) systems for the Air Force. Managing over 200 C⁴I systems, ESC's budget totals $4 billion.

Of particular interest during the ESC visit was a tour of an operational battlelab — the Command and Control Unified Battlefield Environment, known as the CUBE. Its primary mission is developing, integrating, testing, and supporting command and control equipment in an operational environment. Besides promoting improved fact-based decision making by participants about hardware, software, and processes, the CUBE is capable of generating responses to the "what-if" questions for opera-

While at the Bedford facility, Black and Cerutti held discussions with Eugene Stockton, Raytheon Electronic Systems Director for Product Assurance. Topics varied from updates on selected acquisition programs and the education that Raytheon provides its senior- and mid-level managers, to joint Raytheon/DCMC efforts toward implementing several specific Acquisition Reform (AR) initiatives:

• Reinvention Lab Efforts to Obtain Regulatory Waivers
• Single Process Initiative Activities
• Performance-Based Contracts
• Past Performance
• Proposal Structures
• Integrated Product Teams
• Process-Oriented Contract Administration Services
• Cost As An Independent Variable (CAIV)
• Prime/Subcontractor Relations
• Best Practices
• Acquisition Metrics

Much of the material and information gathered during the discussions later served to update DSMC course materials.

How Can We Serve You?

Anyone who desires to take a course offered at the Eastern Regional Center or any other DSMC facility should first contact their local training office for detailed Service/Component/organization procedures on how to apply for DSMC courses. The Service/Component-level points of contact listed in the DSMC 1998 Catalog can advise on specific application procedures. For catalog requests or general information about DSMC courses, schedules, etc., call the Office of the DSMC Registrar at (703) 805-3681, DSN 655-3681, or Toll Free 1-888-284-4906. Information about DSMC courses, schedules, etc., is also available at http://www.dsmc.dsm.mil on the DSMC Home Page.

FORCE XXI PROCESS SPAWNS

JIM CALDWELL

FORT MONROE, Va. (Army News Service, Oct. 8, 1997) In the process of building the Force XXI Experimental Force [EXFOR] to test new technologies and concepts, the Army also created a possible model for military materiel acquisition.

"We have developed a management team between all segments of the Army and industry, and they're working very closely here at Fort Hood [Texas]," said Col. Tom Metz, director of the EXFOR Coordination Cell.

Under the umbrella of the Joint Venture program, the Army brought together developers from Training and Doctrine Command, combat soldiers from Forces Command, acquisition officials from Army Materiel Command, and the program executive officers and program managers for various weapons systems and technology programs. Industry technicians also joined the Army team at Fort Hood.

Their task was to create an organizational, doctrinal, and technological base for the EXFOR that might serve the Army in the 21st Century.

Soldiers from the 1st Brigade, 4th Infantry Division at Fort Hood have trained on the equipment and undergone advanced warfighting experiments [AWE] for about two years. The Task Force XXI AWE in March at the National Training Center [NTC], Fort Irwin, Calif., against the NTC's Opposing Force, was the ultimate test of the training and technologies.

The EXFOR Coordination Cell oversaw the outfitting of the 1st Brigade Combat Team with appliqued M1 and M2 tanks, digital communications, and other updated weapons systems.

"When you bring the commands, agencies, and industry together with the warfighting soldier, then you can move into the information age so much quicker with the cooperation this synergism gives you," Metz said.

"We've got to develop procedures to take advantage of the tremendous technological reservoir that the American public and the American industry has to offer."

Metz says the Army has already achieved great successes just by creating the EXFOR and involving all the segments of the Army and industry.

The arrangement showed benefits soon after Task Force XXI's connectivity exercise. Soldiers discovered that the ITT-built SINCGARS (single channel ground air radio system) digital radios had a shorter range than specified when voice and data were sent over the same channel. The radios also developed a squeal when in use, and the digital timing drifted.

ITT technicians returned to the laboratory. Six weeks later they delivered 1,600 new radios which operated to the standards the Army required. Such an accomplishment normally takes three to four years, Metz said.

When new equipment is put to use by soldiers, shortcomings are quickly discovered. Soldiers can also enhance the equipment's performance, according to Lt. Col. John Langhauser, Joint Venture Operations Officer at TRADOC Headquarters at Fort Monroe.

"A contractor tries to understand the Army view, but he operates in a different system and sees life a little bit differently," Langhauser said. "Quite often he does build a piece of equipment that does everything that we've described and said we wanted it to do.

POSSIBLE NEW ACQUISITION METHOD

"Then a sergeant, sergeant first class, captain, or lieutenant who is using that equipment comes up with something completely new that he can do with that piece of equipment.

"He's taken and synthesized, if you will, the changes and realized that there's a totally new and different capability. That new capability could completely change the way we do things."

With decision makers and product designers on hand to witness that innovation, the improvements can more quickly become part of doctrine, tactics, techniques, and procedures. It can also lead to an even greater improved piece of equipment in later generations.

Both men described the previous acquisition system, most of which exists today.

In the 1980s, they said, the Army decided it needed a 70-ton tank, with a certain size gun, capable of a specified speed. When industry delivered that type of tank, then the Army created an organization to use it. Later came the doctrine, TTPs [tactics, techniques, and procedures], and the training programs to tell soldiers how to use the tank.

"In the industrial age you were able to describe an end state, and over a long period of time, you were able to achieve it in a very sequential way," Metz said. "In the information age, on the other hand, you don't necessarily know what the end state will be because you're learning so much through the process.

"We need to be good stewards of our taxpayers' money. But we will not experience all the goodness we could from the information age by maintaining our slow, sequential process. We can't decide to buy a system for a 20-year life span because the hardware and software turnover is at 20 times the 20-year life span."

Although the military acquisition program remains the same, Congress has funded a Rapid Acquisition Program for fiscal year 1997. The Army will have $50 million to buy selected equipment which prove their worth during the EXFOR AWE.

"We have to come up with decisions fairly quickly, in the neighborhood of 30 days, as to which pieces of equipment we want to include in the RAP process," Langhauser said.

One limitation to the RAP is that none of the items can already be part of the program objective memorandum, or POM, which obligates money for materiel.

"So when we come out with a new list of things we would like to have funded through RAP, that doesn't necessarily mean that Number 1 on that list performed the best in the AWE," he said. "We may already have what proves to be the very best system out there in a POM line."

RAP is a temporary program that takes advantage of the results of the Force XXI process. The Department of Defense needs modern, formal procedures for military acquisition.

"We have the process for the future," Metz said. "We just need to capture it, codify, and make it legal so that it properly protects our taxpayers' dollars."

Editor's Note: Caldwell is with the TRADOC Public Affairs Office, Fort Monroe, Va. This information is in the public domain and may be accessed from the U.S. Army Link News (**http://www. dtic.dla.mil/armylink/news**) on the World Wide Web. (Whenever feminine or masculine nouns or pronouns appear, other than with obvious reference to named individuals, they are meant in their generic sense.)

Simple Rules a Program Manager Can Live By

Getting Back to the Basics

LT. COL. WAYNE M. JOHNSON, U.S. AIR FORCE

With acquisition reform, reengineering, downsizing, rightsizing, and old-fashioned turmoil, a lot of interest from the public as well as the private sectors now focuses on how we, as program managers, do business. Because of this increased focus and interest, many organizations are attempting to quantify what they do.

Back to the Basics

In response to this growing interest, my experience and that of many other program managers tells me that we need to get back to the basics:

- What are we doing?
- How are we doing?
- How do we know?

Instituting planning charts, financial summary charts, and color-coded risk and status charts are not by themselves marks of progress. The team must actually understand and use the material. To do that, we need to employ the basics — planning a solid program using common sense and sound management techniques.

Some organizations appear to have lost sight of that. They're doing solid planning from a technical perspective, but not applying those same disciplined techniques to the business side. The tools we use to plan, organize, and evaluate should be just that — tools...but not an end in themselves. The rules that follow aren't new, exciting, or terribly insightful; but they work, and may help you avoid some of the problems and pitfalls in getting the job done.

Step No. 1

Don't Try to Impress People by Building a Better Mouse Trap. In trying to express this concept in ways that are new and different, words fail me. Tired old phrases come to mind like "Don't reinvent the wheel" and "Don't fix what isn't broken" — neither of which is likely to hold anyone's attention. Regrettably, there's no fascinating way to say what we all know to be true: *The institutional resistance (inertia) of "not invented here" needs to be addressed up front*. Think about it. Why not borrow a good idea from another acquisition office, give the originator credit, improve the process or idea, and move on? This is much more efficient and productive than trying to come up with that one "brilliant idea" yourself.

With this philosophy in mind, keep an eye out for good ideas in your own organization. As the old saying goes, "You'd be surprised what you can accomplish if you don't mind who gets the credit." So see what works, and keep it. If what you have or what you've tried isn't working, start with Step No. 2.

Step No. 2

Know Who the Customer Really Is. The customer is the one who is putting up the financial resources — right? Well, most of the time. As an example, the customer for U.S. Air Force combat fighters and bombers is the Air Combat Command (ACC). But when it comes to developing requirements, the acquisition community is ACC's customer. That's right. If the warfighter's requirements aren't nailed down, how can you acquire a system that they will be happy with? Moreover, if the requirements constantly change, and the customer doesn't seem to know what he or she wants, we have "Requirements Creep." And depending on who is in the meeting, "Requirements Creep" may be a noun or a verb.

Once your customer has understandable and definitive requirements, you must know what the cost, schedule, and performance parameters are and baseline the program. Yes, I said baseline! Without it, you won't be able to communicate to the customer what is required to successfully fulfill the requirement, and they won't know what to expect in return. Put another way, a baseline serves as the vehicle for establishing and tracking a common set of expectations.

In developing a program baseline that incorporates cost, schedule, and performance, don't forget that your project integrates with a lot of other products and processes, such as training, spare parts, or maintenance equipment. Some people develop a baseline as a document. I like to think of it as a set of briefing charts (which helps me stifle my own verbosity). Perhaps you will

find, as I did, that most of the benefit of a simple baseline document (I recommend keeping it to six to eight charts) is in building it and coordinating with all the affected agencies, including the customer. As a forcing function, the baseline applies discipline in bringing the program together and ensures that its strategy is supportable.

Step No. 3
Get a Second Opinion. Suppose you went to the doctor for a standard check-up and received a dire prognosis. You would then likely seek a second opinion. Likewise, if your program receives word that it has a sudden illness, but it seems fine, get a second opinion. I know of a program manager who went "ballistic" after hearing that a piece of Government Furnished Equipment (GFE) was not going to be available for his program. After being "sliced and diced" by the customer, he finally had to elevate it to his supervisor. The supervisor then called a different "expert" point of contact and found there was plenty of the GFE item available.

The lesson to be learned from this true situation again takes us back to the basics. When things unexpectedly look bad, get a second opinion on the situation. The same is true for those times that you believe things are "headed south," and your single point of contact says, "Don't worry, be happy" — *get that second opinion.*

Step No. 4
All Software Development Is Moderate Risk. "What you see is not always what you get," is a general rule of software development. While debugging and testing a program may reveal many hidden problems, these actions alone can not guarantee that all problems are detected. Historically, soft-

Historically, software has proven difficult to scope as well as insidiously susceptible to requirements growth. Keep this axiom in mind: "The more complex your solution, the more vulnerable it is to simple problems."
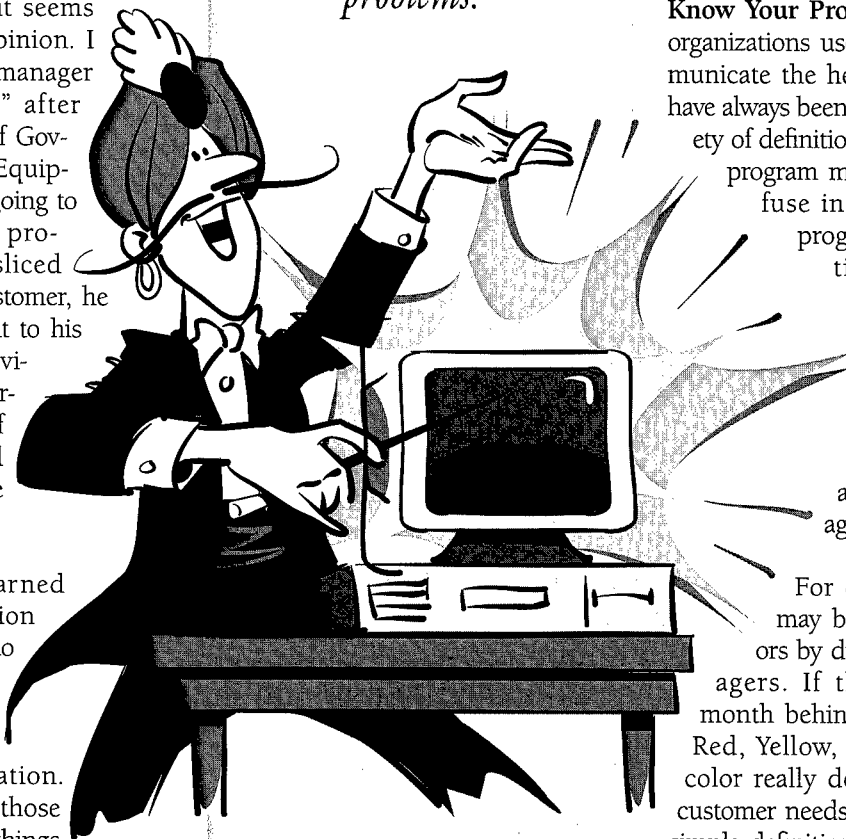
Be wary of magicians who claim that previously discovered hardware problems can be fixed with a simple software mod.

ware has proven difficult to scope as well as insidiously susceptible to requirements growth. Keep this axiom in mind: "The more complex your solution, the more vulnerable it is to simple problems." Be wary of magicians who claim that previously discovered hardware problems can be fixed with a simple software mod. One senior Program Director once told me his rule of thumb: no matter where you are in software development, you are always two years behind schedule and need twice as much money. *Expect it, plan for it, and manage it.*
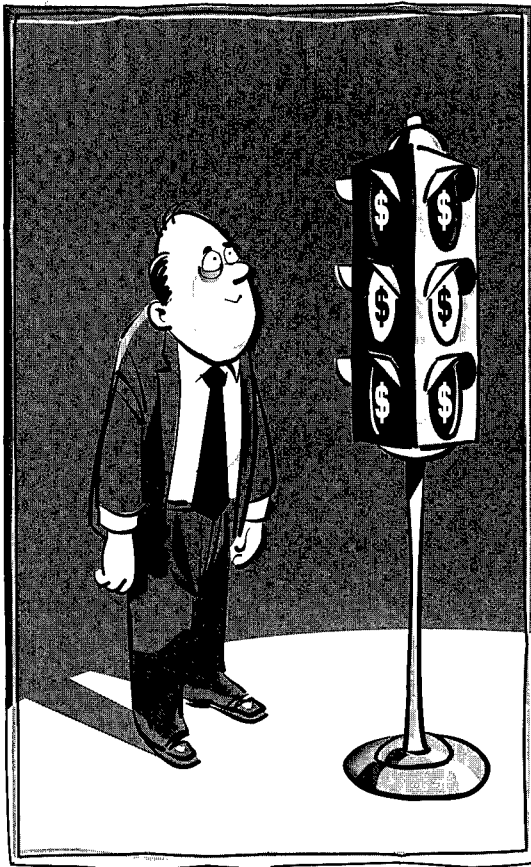
Step No. 5
Know Your Program's Status. Many organizations use color codes to communicate the health of the project. I have always been fascinated by the variety of definitions and the finite detail program managers use and confuse in defining whether a program, project or functional area is Green, Yellow, or Red. Depending on the management philosophy of the organization, Green, Yellow, or Red is usually the program manager's own assessment.

For example, a problem may be coded different colors by different program managers. If the program is one month behind, do you evaluate it Red, Yellow, or Green? Well, the color really depends on when the customer needs it. Let me offer three simple definitions for you to consider when preparing color-coded future assessments.

If the program or project fills your day, keeps you challenged, and is a reason why they need you in government service, the program is Green.

If you ponder the day's events on the drive home and know that your boss will be irritated to hear from someone other than you about the latest "fun" you are having, the program is Yellow.

*If the program or project fills your day, keeps you challenged, and is a reason why they need you in government service, the program is **Green**. If you ponder the days events on the drive home and know that your boss will be irritated to hear from someone other than you about the latest "fun" you are having, the program is **Yellow**. If you find yourself waking up in a cold sweat in the middle of the night considering other employment options, hoping that your boss can help you right the ship, the program is **Red**.*

funding, no one would pay any attention to us. Start thinking of financial planning documents as program management planning documents because that's what they really are. Always be familiar with your financial situation and watch for the shell game. If you depend on too many good things to happen in order to be successful, you probably won't be. So, if you aren't managing the money, you aren't managing the program. *That's always the bottom line.*

Step No. 7
Summarize Meetings. Have you ever sat through a one-hour meeting listening to each and every member speak their mind? At the end of the meeting,

If you find yourself waking up in a cold sweat in the middle of the night considering other employment options, hoping that your boss can help you right the ship, the program is Red.

Step No. 6
Follow the Money. Don't kid yourself. Everything we do is connected to money, and if we didn't control the

Don't kid yourself. Everything we do is connected to money, and if we didn't control the funding, no one would pay any attention to us. Always be familar with your financial situation...If you depend on too many good things to happen in order to be successful, you probably won't be...If you aren't managing money, you aren't managing the program. That's always the bottom line.

with 15 suggestions from six people, it is difficult to know who plans to do what unless the program manager summarizes for the group what the course of action will be. If, at the end of your meeting, you haven't summarized a plan of action, you might find yourself rescheduling another meeting to do just that. Get yourself into the habit of summarizing each meeting and save time, effort, and a lot of headaches down the road.

Step No. 8
Use The Aunt Agnes Test. A situation develops that requires you, the program manager, to make a decision. But does the course of action you are about to select make sense? In acquisition, we have surrounded ourselves with processes, integrated acronym lists (IAL), and program management review teams, all of which can deprive us of our common sense. I've been taught to use this simple test:

Pretend you have an "Aunt Agnes" who owns a farm in Iowa where she grows corn. Can you explain the program and your decision to her? Would she understand it? Does it make sense? Can you defend the course of action to her? If the answer to any of these is "no," then rethink your strategy because you are about to lose your way. And don't bother looking up IAL — I made that up. You didn't know that? See? Unnecessary complexity will only confuse Aunt Agnes, and your customer. The defense rests.

Step No. 9
Make a Decision. We have all sat in meetings where a detailed, insightful discussion about the pros and cons of a project occurred to the nth degree. But in the end, no one knew what course of action the program manager agreed to. What did he really want? Did she say, go ahead? The difference between the program manager and a lot of process-oriented staff help is that you are required to make decisions. Don't forget that; if you don't, you will be out of a job.

Pretend you have an "Aunt Agnes" who owns a farm in Iowa where she grows corn.
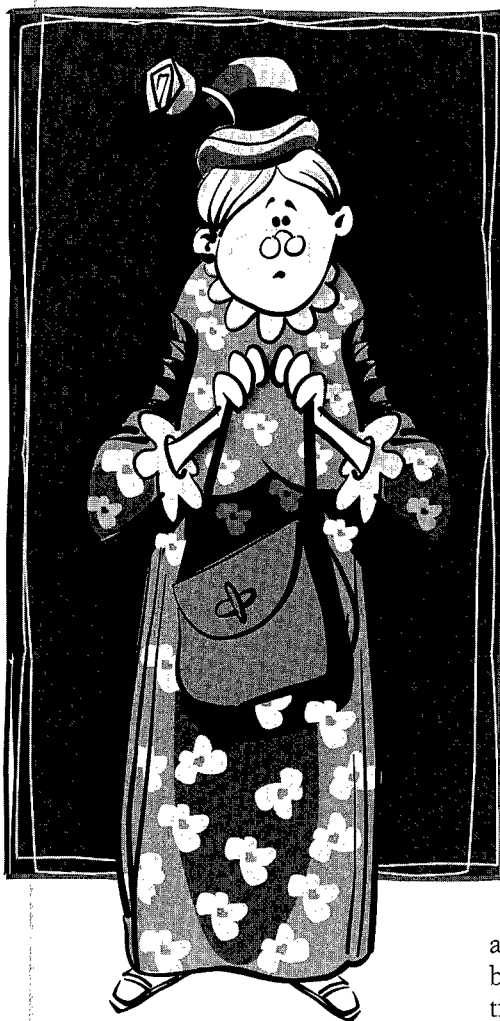
Can you explain the program and your decision to her? Would she understand it? Does it make sense? Can you defend the course of action to her? If the answer to any of these is "no," then rethink your strategy because you are about to lose your way.

Sometimes the worst decision is no decision. Be careful not to get caught in this type of organizational paralysis. One senior acquisition leader once advised that "You need to go into the job assuming you have already been fired — only then will you be willing to make the right decisions." Take in the important details, look at the alternatives, understand the options, then make a decision and move on.

Step No. 10
Manage, But Don't Micromanage. Stay focused on the goals and ideas that are important to you, and stick to the basics. Watch the details without micromanaging your team. You can't always be there to answer the questions yourself, so you need to make sure your team knows what is going on. Treat everyone, including the contractor, with respect. And, dare I say it, have fun.

Being a program manager is a lot like being a utility infielder in baseball. You know what will make your effort successful, and you have a team full of functional experts to help you along the way. Let them know what you expect from them, and chances are they won't let you down. Remember, these jobs are 10 percent expertise and 90 percent common sense. To win the game, stick to the basics, focus on your goal, and rely on teamwork.

Above All, Keep It Simple
You don't get paid more for making it complicated, so stick to the basics. The tools for becoming a more effective program manager, which I've outlined in this article, are all quite simple. Every one of us has thought of them, but the actual working process can still be confusing. When you think you are losing control of a project, check to see if you are following these simple tips. Chances are you will quickly recognize how to fix it.

The Truth in Negotiations Act — What is Fair and Reasonable?

TINA Waivers Can Streamline Procurement and Reduce Data Requirements

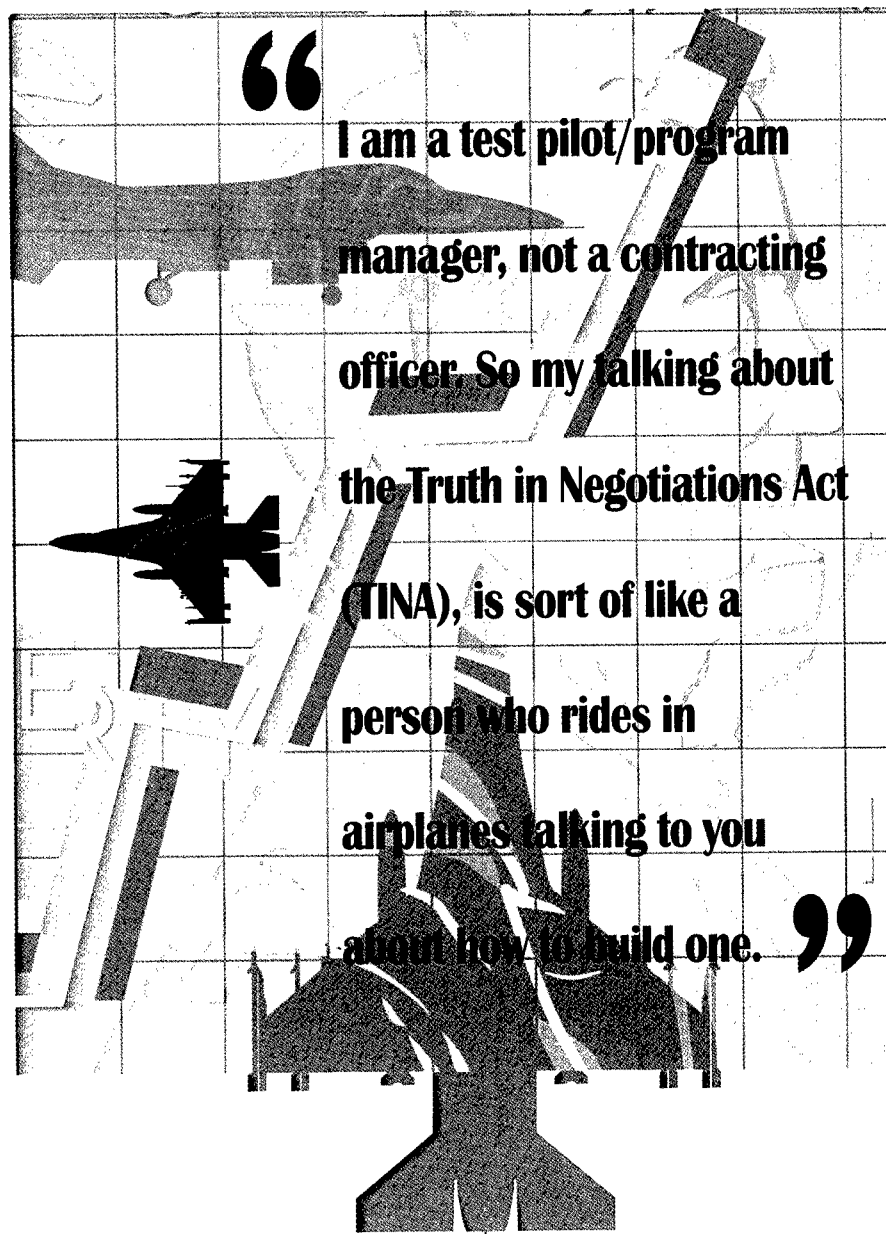### COL. JEFFREY R. RIEMER, U.S. AIR FORCE

I am a test pilot/program manager, not a contracting officer. So my talking about the Truth in Negotiations Act (TINA), is sort of like a person who rides in airplanes talking to you about how to build one. Therefore, my purpose in writing this article is to heighten your awareness of TINA and its provisions, and show you, the reader, how recent initiatives and legislation generated by acquisition reform, may be of use to you in negotiating and developing government contracts.

First, a word of caution. It is not my purpose to make you contracting officers. To preclude any unfavorable repercussions to yourself and your program, *do not* use this information without the direct supervision of your contracting expert.

Acquisition Reform and the Contracting Process

Public Law 87-653, Truth in Negotiations Act (TINA), was enacted on September 10, 1962. The law specifies, when dealing in a sole source environment, that each government procurement contracting officer (PCO) must certify as accurate, complete, and current all cost or pricing data associated with each government contract.

Originally, Congress enacted TINA to ensure a standard of measurement for "fair and reasonable" pricing when

> " I am a test pilot/program manager, not a contracting officer. So my talking about the Truth in Negotiations Act (TINA), is sort of like a person who rides in airplanes talking to you about how to build one. "

Riemer is the Program Director, Special Programs, Aeronautical Systems Center, Eglin Air Force Base, Fla. A distinguished graduate of the Air Force Test Pilot School at Edwards Air Force Base, Calif., he served as an instructor pilot at the Test Pilot School as well as subsequent assignments as an F-16 operations officer and division chief, squadron commander, program manager, and OSD military staff assistant. Riemer has over 4500 hours of flying time in more than 100 different military and civilian aircraft. He is a graduate of PMC 90-3 and EPMC 97-2, DSMC.

contracting in a non-competitive environment, and to provide a contractual remedy to defective pricing. The law, however, in my opinion, left contracting officers with very little discretion in deciding whether or not a legitimate requirement to provide cost and pricing data did, in fact, exist for a given contract. To prevent any second-guessing about their decisions, PCOs repeatedly used cost and pricing data to determine fair and reasonable prices. This conservative approach was the accepted way of doing business, and as a result, the government paid substantial sums of money in proposal preparation costs to produce required data. In addition to proposal preparation costs, the time to get "on contract" lengthened while contractors prepared data and the government subsequently analyzed it.

Not until the recent spate of acquisition reform initiatives and legislation, has the risk-aversion climate prevalent throughout the procurement and contracting community, literally reversed itself to now encourage stepping "outside the box" and approaching problems from another point of view.

During my previous assignment at the F-16 System Program Office (SPO), we applied for and received a waiver to TINA for the fiscal year 1996 purchase of six new F-16 aircraft. In my current position, we also applied for and received a TINA waiver to streamline our procurement process. Both initiatives significantly reduced the time to get "on contract" and saved money in proposal preparation costs. In addition, recent changes to the Federal Acquisition Streamlining Act (FASA) resulted in added relief from proposal preparation costs generated by a perceived need for cost or pricing data. In this article, I will discuss TINA waivers as well as what you should know about TINA-related changes in the FASA.

About TINA Waivers

As discussed previously, TINA requires the contractor to submit cost or pricing data; certify the data as current, accurate, and complete; agree to a

defective pricing clause; and agree to accept audit and subcontractor certification clauses. Further, the Federal Acquisition Regulation (FAR) mandates that the PCO determine whether or not negotiated prices are, in fact, fair and reasonable. To determine a fair and reasonable price, the PCO relies on two methods:

Cost Analysis. Cost analysis, which takes into account all elements of a proposal, requires that the PCO rely on certified cost or pricing data. For example, the direct labor, materials, subcontractor and supplier efforts, overhead rates and factors, and tooling costs are the types of items that receive detailed analysis. Several agencies—such as the Defense Contract Audit Agency (DCAA), the Defense Contract Management Command (DCMC), and the SPO – play an important role in the analysis. As you can imagine, ensuring that the government receives a fair and reasonable price upon which to base a decision to buy is a time-consuming process for the contractor as well as the government .

Price Analysis. Price analysis, on the other hand, provides no insight into the individual cost or price elements. This type of analysis (obtained by comparing previous buys, historic data, regression, and parametrics) primarily focuses on the bottom-line price. In contrast to cost analysis, price analysis *does not* rely on certified cost or pricing data.

The F-16 SPO executed its last U.S. Air Force aircraft production contract (prior to the fiscal year 1996 buy) in fiscal year 1994. The fiscal year 1994 buy of 12 Block 50 aircraft was based on cost analysis. This was to be the last U.S. Air Force buy of F-16s. However, in the fiscal year 1996 Defense Appropriations Bill, based on F-16 attrition rates, Congress added six F-16s to the U.S. Air Force F-16 procurement budget to address a projected shortfall in F-16s in the out-years.

The accelerated pace and progress of acquisition reform since execution of

the last U.S. Air Force F-16 production contract has resulted in expanded tolerance and increased opportunities for out-of-the-box thinking. As a result of its own out-of-the-box thinking, the F-16 SPO implemented several acquisition reform initiatives in a concerted effort to demonstrate the capability and potential cost savings from buying F-16 aircraft on an annual versus "as needed" basis.

To begin building a streamlined process, the SPO used the Single Acquisition Management Plan (SAMP), Statement of Objectives (SOO), and a joint proposal. In addition, they reduced military specifications 91 percent, reduced data deliverables 61 percent, and formally requested a TINA waiver to accelerate the process of awarding a definitized contract.

In pursuing the TINA waiver, the F-16 SPO was guided by the provisions of the FAR, paragraph 15.804-1(b)(5), which states, "a waiver may be considered if...the price can be determined to be fair and reasonable without submission of cost or pricing data." The fiscal year 1996 aircraft was very similar to the aircraft procured in fiscal year 1994. Because of that similarity, the government and contractor database yielded sufficient price history and enough recent information to warrant price analysis on the fiscal year 1996 buy, which then allowed the F-16 SPO to make determinations of fairness and reasonableness.

This resulted in a much smaller proposal that produced a savings of $1.5 million in proposal preparation costs. The contractor submitted a price for six aircraft, and the final result was an aircraft unit price $300 thousand less than the price paid for the fiscal year 1994 aircraft (price and quantity decreased). In addition, the F-16 SPO awarded a definitized contract within 195 days from the first planning meeting. This reduced by 800 days the time required to definitize the fiscal year 1994 contract. As evidenced by the

end result, for the F-16 SPO, the TINA waiver approach was very successful.

My second experience in formally requesting a TINA waiver was in conjunction with the program for which I am currently program director. We employed streamlining initiatives similar to the F-16 program, and implemented a Review-Discuss-Concur process with our contractor to award the contract. We also reduced military specifications by 98 percent, data deliverables by 65 percent, and contracting span time by 50 percent. The cumulative effect resulted in a contract award in four months.

In these two cases, the TINA waiver was possible based on the availability and accessibility of information needed to support the waiver and the procurement content. Admittedly, a TINA waiver may not be applicable for everyone; however, it might be worth considering if the following conditions are present: recent historical cost or price data; a similar configuration; minimal changes to the Government Furnished Equipment versus the Contractor Furnished Equipment content; a preponderance of previously seen costs; and nominal non-recurring costs, or the existence of a validated parametric pricing model upon which to base a fair and reasonable price determination.

In addition to a TINA waiver, recent change to the FASA, resulting in more flexibility and tolerance of reasoned risktaking versus total risk aversion, now makes it easier for the PCO to do what is smart, and eliminates much of the second-guessing and scrutiny previously directed at the PCO's decisions.

The sidebar following this article includes excerpts from a Defense Acquisition University publication, summarizing how "changes in the Federal Acquisition Streamlining Act (FASA) of 1994 are implemented in the Federal Acquisition Regulation (FAR) rules. [These excerpts] also include anticipated FAR changes resulting from [passage of the] Federal

" The F-16 SPO boldly stepped out and received approval of the first-ever TINA waiver to buy fighters for the warfighter. "

Acquisition Reform Act/Information Technology Management Reform Act (FARA/ITMRA)."[1]

Summary

It is time to stop doing things the way we have always done them. The time is right to surface better ways of doing business at whatever level is necessary to effect change. The F-16 SPO boldly stepped out and received approval of the first-ever TINA waiver to buy fighters for the warfighter.[2] Some people said it could not be done — but it worked. Now others are following in the F-16 SPO's footsteps.

The law is changing to facilitate acquisition reform. The changes related to TINA are just an example of many such changes, all supporting the F-16 SPO's contention that *the time is right.* If you think you have a good idea that will save the taxpayer money, then keep telling people about it until someone listens. To paraphrase Winston Churchill, *Never, never, never give up.*

REFERENCES

1. "Legislative Impacts on Acquisition Reform," Acquisition Reform Communications Center (Defense Acquisition University, Alexandria, Va.), 1996.

2. "F-16 TINA Initiative," Briefing, F-16 Contracts Division, F-16 System Program Office (Aeronautical Systems Center, Wright-Patterson Air Force Base, Ohio), 1996.

TRUTH IN NEGOTIATIONS ACT (TINA)

FASA and FARA/ITMRA Revisions Impacting TINA

What FASA Did

- Established a hierarchical preference for the types of information used to assess price reasonableness.

- Created a "bright line" between cost or pricing data and all the other information.

- Precluded requiring cost or pricing data if an exception applied. Encouraged a waiver even if an exception did not apply.

- Added a new exception for commercial items.

- Made cost or pricing data the method of last resort.

- Eliminated the SF 1412, the relational formula, government end use request, and most favored customer requirements.

What You Should Know

The fundamental obligation of the contracting officer to determine price reasonableness is unchanged. Consider FAR's new order of priority to support analysis of price reasonableness as an inverted pyramid. The volume of information increases as you climb higher. The contracting officer shall "climb" only high enough to determine price reasonableness. There are three generally accepted levels:

- **Adequate Price Competition.** Generally, require no further information from the offeror if you determine the price is based on adequate price competition.

- **Information Other Than Cost or Pricing Data.** This new term means "any type of information that is *not required to be certified* but is needed to determine price reasonableness or cost realism."

- **Cost or Pricing Data Are Data Requiring Certification.** This term replaces the "certified cost or pricing data" that was used inconsistently. Cost or pricing data shall be submitted on Standard Form 1411, Contracting Pricing Proposal Cover.

Exceptions to Cost or Pricing Data

- **Adequate Price Competition.** Adequate price competition based on two or more responsible offerors, competing independently, submitting priced offers responsive to the government's requirement.

- **Established Catalog or Market Price.** Established catalog or market prices are prices recorded in a catalog or price list or other regularly maintained, verifiable record. Market prices are established in the course of ordinary trade between buyer and seller and can be substantiated from independent sources.

- **Prices Set by Law or Regulation**

- **Commercial Item.** There is a new commercial item exception when the contracting officer has insufficient information to determine another exception applies.

- **Modification of Contracts for Commercial Items.** Modification of contracts for commercial items are exempt when the original contract or subcontract was exempt from cost or pricing data.

A waiver may be considered if price reasonableness can be determined without submission of cost or pricing data, but no exception applies. The Head of the Contracting Agency or Activity (HCA) is the waiver authority with no power to delegate. If a waiver is given, the contractor is considered as having been required to submit cost or pricing data. Any award to a subcontractor expected to exceed the threshold requires the submission of cost or pricing data unless an exception applies.

The threshold for cost or pricing data is now $500,000. The contracting officer must still determine price reasonableness, but if no exception applies and a waiver is not appropriate, the HCA must determine that cost and pricing data are necessary to determine reasonableness below the TINA threshold but above the simplified acquisition threshold.
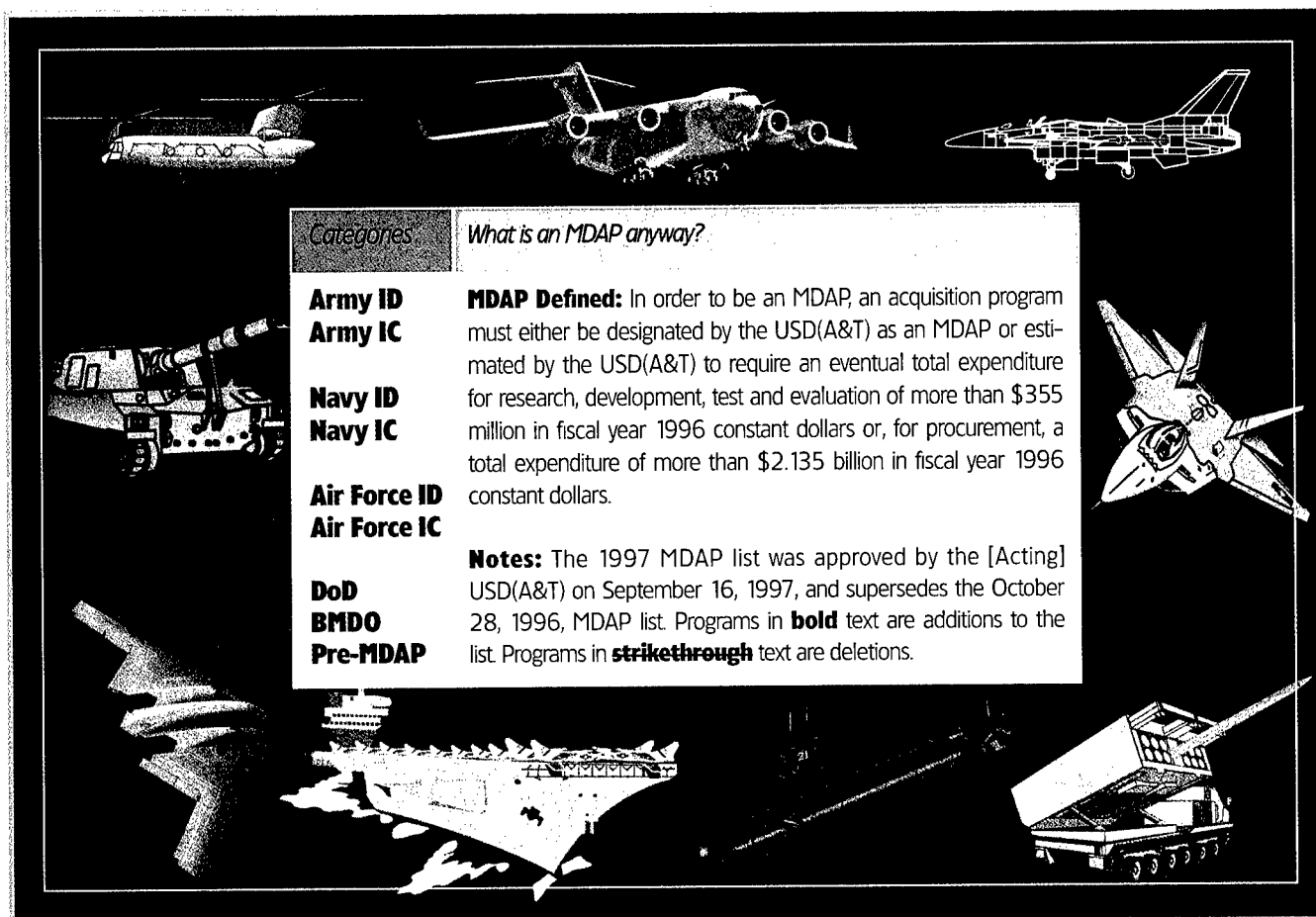
The FAR rule incorporates a definition of cost realism analysis. Cost realism means that costs in the offeror's proposal are realistic for the work to be performed, reflect a clear understanding of the requirement, and are consistent with the technical proposal. The agency must perform a cost realism analysis whenever a cost type contract is contemplated, whether or not cost or pricing data are requested.

Anticipated Impact of FARA/ITMRA

- Makes the commercial item exception co-equal with other exceptions and obviates the need for exceptions based on Established Catalog or Market Price.

- Removes the government's right to conduct a post-award audit of data submitted by commercial suppliers in lieu of cost and pricing data.*

* "Legislative Impacts on Acquisition Reform," Acquisition Reform Communications Center (Defense Acquisition University, Alexandria, Va.), 1996, pp. 11-12.

1997 Major Defense Acquisition Programs (MDAP) List

Categories

Army ID
Army IC

Navy ID
Navy IC

Air Force ID
Air Force IC

DoD
BMDO
Pre-MDAP

What is an MDAP anyway?

MDAP Defined: In order to be an MDAP, an acquisition program must either be designated by the USD(A&T) as an MDAP or estimated by the USD(A&T) to require an eventual total expenditure for research, development, test and evaluation of more than $355 million in fiscal year 1996 constant dollars or, for procurement, a total expenditure of more than $2.135 billion in fiscal year 1996 constant dollars.

Notes: The 1997 MDAP list was approved by the [Acting] USD(A&T) on September 16, 1997, and supersedes the October 28, 1996, MDAP list. Programs in **bold** text are additions to the list. Programs in strikethrough text are deletions.

The 1997 MDAP List was signed by the [Acting] Under Secretary of Defense for Acquisition and Technology on September 16, 1997. Which lucky program managers will be treated to the wisdom of headquarters oversight? Check out this article for the answer.

ARMY DAB (ACAT ID) LIST

- ATACMS-BAT — Army Tactical Missile System-Brilliant Anti-Armor Submunition which includes ATACMS BLOCKS II/IIA, BAT, and BAT P3I.
- COMANCHE (RAH-66) — Light Helicopter.
- CRUSADER (AFAS/FARV) — Advanced Field Artillery System/Future Armored Resupply Vehicle.
- FOTT — Follow-on to TOW.
- JAVELIN — Advanced Anti-Tank Weapon System — Medium. *Moved to Army ACAT IC list.*
- JSTARS GSM — Joint Surveillance and Target Attack Radar System Ground Station Module.
- MCS (ATCCS) — Maneuver Control System (Army Tactical Command and Control System).

ARMY COMPONENT (ACAT IC) LIST

- ABRAMS Upgrade — Abrams Tank Upgrade
- AFATDS (ATCCS) — Advanced Field Artillery Tactical Data System (Army Tactical Command and Control System).
- ASAS (ATCCS) — All Source Analysis System (Army Tactical Command and Control System).
- ATACMS-APAM — Army Tactical Missile System-Anti-Personnel Anti-Materiel BLOCKS I/IA.
- ATIRCM/CMWS — Advance Threat Infrared Countermeasures/Common Missile Warning System.
- BLACKHAWK (UH-60L) — Utility Helicopter.
- BRADLEY FVS Upgrade — Bradley Fighting Vehicle System Upgrade.
- CSSCS (ATCCS) — Combat Service Support Control System

(Army Tactical Command and Control System).

- FAAD C2I (ATCCS) – Forward Area Air Defense Command, Control, and Intelligence (Army Tactical Command and Control System).
- FMTV – Family of Medium Tactical Vehicles.
- **JAVELIN** – Advanced Anti-Tank Weapon System – Medium. *Moved from Army ACAT ID list.*
- KIOWA WARRIOR (OH-58D) – Armed OH-58D.
- LONGBOW APACHE – Radar-Based Target Acquisition and Fire Control System, which includes airframe modifications on the APACHE Helicopter.
- LONGBOW HELLFIRE – HELLFIRE Missile System compatible with the LONGBOW Fire Control Radar.
- **MLRS UPGRADE** – Multiple Launch Rocket System Upgrade. *Moved from Army Pre-MDAP list.*
- SADARM – Sense and Destroy Armor.
- SINCGARS – Single-Channel Ground and Airborne Radio System-VHF.
- SMART-T – Secure Mobile Anti-Jam Reliable Tactical–Terminal.

NAVY DAB (ACAT ID) LIST

- AAAV – Advanced Amphibious Assault Vehicle.
- AIM-9X – Air-to-Air Missile Upgrade.
- ~~F/A-18 E/F HORNET~~ Naval Strike Fighter. *Moved to Navy ACAT IC list.*
- JSOW – Joint Stand-Off Weapon.
- LPD 17 – Amphibious Assault Ship.
- MIDS-LVT – Multi-Functional Information Distribution System-Low Volume Terminal.
- NSSN – New Attack Submarine.
- USMC H-1 Upgrades (4BW/4BN) – United States Marine Corps Mid-life Upgrade to AH-1W Attack Helicopter and UH-1N Utility Helicopter.

- ~~V-22~~ – OSPREY Joint Advanced Vertical Lift Aircraft. *Moved to Navy ACAT IC list.*

NAVY COMPONENT (ACAT IC) LIST

- AN/SQQ-89 – Surface Ship Anti-submarine Warfare System.
- ~~AOE 6~~ – Fast Combat Support Ship. *90% complete; removed from Navy ACAT IC list.*
- AV-8B Remanufacture – Short Takeoff and Landing (V/STOL) Close Air Support Aircraft.
- CEC – Cooperative Engagement Capability.
- CVN 68 – NIMITZ Class Nuclear Powered Aircraft Carriers.
- DDG 51 – Guided Missile Destroyer, which includes basic ship and all variants.
- E-2C Reproduction – HAWKEYE Carrier-Based Early Warning Aircraft.
- **F/A-18 E/F – HORNET** Naval Strike Fighter. *Moved from Navy ACAT ID list.*
- LHD 1 – Amphibious Assault Ship.
- MHC 51 – Coastal Mine Hunter.
- NESP – Navy EHF SATCOM Program.
- SH-60R – Multi-Mission Helicopter Upgrade.
- SM 2 (BLOCK IV) – Standard Surface-to-Air Missile 2 (BLOCK IV).
- SSN 21/AN/BSY-2 – SEAWOLF Class Nuclear Attack Submarine/Combat System.
- STRATEGIC SEALIFT – Naval Transport Ship.
- T-45TS – Undergraduate Jet Pilot Training System.
- TOMAHAWK – Sea Launched Cruise Missile.
- TRIDENT II MISSILE – Sea Launched Ballistic Missile.
- UHF FOLLOW-ON - Ultra High Frequency Follow-On Communications Satellite.
- **V-22** - OSPREY Joint Advanced Vertical Lift Aircraft. *Moved from Navy ACAT ID list.*

AIR FORCE DAB (ACAT ID LIST)

- ABL – Airborne Laser.
- ~~B-1 CMUP DSUP~~ – LANCER Penetrating Bomber Conventional Mission Upgrade Program - Defensive Systems Upgrade Program (formerly ECM Upgrade). *Moved to Air Force ACAT IC list.*
- EELV – Evolved Expendable Launch Vehicle.
- F-22 – Advanced Tactical Fighter.
- JASSM – Joint Air-to-Surface Standoff Missile.
- JDAM – Joint Direct Attack Munition.
- ~~JTIDS~~ – Joint Tactical Information Distribution System. *Moved to Air Force ACAT III list.*
- MILSTAR – Satellite and ~~User Equipment~~ Terminals.
- SBIRS – Space-Based Infrared System Program; efforts include SBIRS (High) and SBIRS (Low).
- ~~TITAN IV~~ – Space Booster. *Moved to Air Force ACAT IC list.*

AIR FORCE COMPONENT (ACAT IC) LIST

- AMRAAM – Advanced Medium Range Air-to-Air Missile.
- AWACS RSIP (E-3) – Airborne Warning and Control System Radar Systems Improvement Program.
- B-1 CMUP-Computer Upgrade – LANCER Penetrating Bomber Conventional Mission Upgrade Program-Computer Upgrade.
- **B-1 CMUP DSUP** – LANCER Penetrating Bomber Conventional Mission Upgrade. *Moved from Air Force ACAT ID list.*
- B-1 CMUP-JDAM – LANCER Penetrating Bomber Conventional Mission Upgrade Program/Joint Direct Attack Munition.
- B-2A – SPIRIT Stealth Bomber.
- C-17A – GLOBEMASTER III Advanced Cargo Aircraft.
- C-130J – HERCULES Cargo Plane.
- **JSIPS** – Joint Services Imagery Processing System. *Formerly Common Imagery Ground/Surface; Joint*

Services Imagery Processing System (CIGS/JSIPS).
- ~~CMU~~ — Cheyenne Mountain Upgrade. *90% complete; removed from Air Force ACAT IC list.*
- DMSP — Defense Meteorological Satellite Program.
- ~~DSP~~ — Defense Support Program Satellite System. *90% complete; removed from Air Force ACAT IC list.*
- JPATS — Joint Primary Aircraft Training System.
- JSTARS — Joint Surveillance and Target Attack Radar System (Aircraft).
- MINUTEMAN III GRP — Guidance Replacement Program.
- MINUTEMAN III PRP — Propulsion Replacement Program.
- NAS — National Airspace Systems.
- NAVSTAR GPS — Global Positioning System (Includes Satellites and User Equipment).
- SFW — Sensor Fuzed Weapon.
- **TITAN IV** — Space Booster. *Moved from Air Force ACAT ID list.*

DOD DAB (ACAT ID) LIST
- CHEM DEMIL — Chemical Demilitarization Program, consisting of both the stockpile and non-stockpile programs (Army Executive Agent).
- GBS — Global Broadcast Service (Air Force lead).
- JSF — Joint Strike Fighter (Navy lead).
- NPOESS — National Polar-Orbiting Operational Environmental Satellite System (Air Force lead).

BALLISTIC MISSILE DEFENSE ORGANIZATION PROGRAMS (BMDO LEAD)
- PATRIOT PAC-3 — Patriot Advanced Capability (Army Executive Agent).
- Navy Area TBMD — Navy Area Theater Ballistic Missile Defense.
- NMD — National Missile Defense System.

- THAAD — Theater High Altitude Area Defense (Army Executive Agent).
- **NTW** — Navy Theater Wide Ballistic Missile Defense. *Moved from DoD Pre-MDAP list.*
- **MEADS** — Medium Extended Air Defense System (Army Executive Agent). *Moved from DoD Pre-MDAP list.*

PRE-MAJOR DEFENSE ACQUISITION PROGRAM LIST
The Office of the Secretary of Defense has identified the below listed activities as efforts which *may* eventually become Major Defense Acquisition Programs (MDAPs) as defined by 10 U.S.C. 2430.

ARMY PRE-MDAP
- BATTLEFIELD DIGITIZATION
- **IMPROVED CARGO HELICOPTER (ICH)** — Improved helicopter upgrades. *Formerly CH-47D Upgrade.*
- EFOG-M — Enhanced Non-Line-of-Sight Missile effort.
- **HMMLTV** — High Mobility Multi-Purpose Light Tactical Vehicle Program. Replacement of all HMMWVs or replacement of heavy chassis HMMWVs and refurbishment of light chassis HMMWVs.
- LOSAT — Line-of-Sight Anti-Tank.
- ~~MLRS Upgrade~~ — Multiple Launch Rocket System Upgrade. *Moved to Army ACAT IC list.*
- ~~SCAMP (BLOCK II)~~ — Single Channel Anti-Jam. *Unfunded; removed from Army Pre-MDAP list.*
- **FUTURE COMBAT SYSTEM (FCS)** — Follow-on to Abrams Main Battle Tank.
- **FUTURE SCOUT AND CAVALRY SYSTEM (FSCS)** — U.S. AND U.K. cooperative development.
- **FUTURE INFANTRY VEHICLE (FIV)** — Follow-on Bradley Fighting Vehicle.

NAVY PRE-MDAP
- ADC(X) — Auxiliary Dry Cargo Carrier.

- AEW — Airborne Early Warning.
- CV(X) — Next Generation Aircraft Carrier.
- ARSENAL SHIP SC-21 — 21st Century Surface Combatant.
- **CH-60** — Utility helicopter to replace existing CH-46D, HH-60H, SH-3, & UH-1N helicopters.

AIR FORCE PRE-MDAP
- Advanced MILSATCOM — Future EHF and SHF/GBS Military Satellite Communications Systems effort.
- ~~B-1 CMUP JSOW/JASSM~~ — LANCER Penetrating Bomber Conventional Mission Upgrade Program Joint Stand-Off Weapon/Joint Air-to-Surface Standoff Missile. *Below threshold; removed from Air Force Pre-MDAP list.*
- JPALS — Joint Precision Approach and Landing System.

DOD PRE-MDAP
- CID — Combat Identification.
- DARK STAR — Unmanned Aerial Vehicle.
- GLOBAL HAWK — Unmanned Aerial Vehicle.
- **HDBTDC** — Hard and Deeply Buried Target Defeat Capability.
- ~~MEADS~~ — Medium Extended Air Defense System. *Moved to DoD ACAT ID list.*
- ~~NTW~~ — Navy Theater Wide Theater Ballistic Missile Defense. *Moved to DoD ACAT ID list.*
- ~~PREDATOR~~ — Unmanned Aerial Vehicle. *Moved to Air Force ACAT II list.*
- PMCS — Programmable Mobile Communications System.
- TACTICAL UNMANNED AERIAL VEHICLES (DoD lead).

Editor's Note: This listing is in the public domain on the World Wide Web. Visit the "What's New" Link on the *ACQ*Web Home Page (http://www.acq.osd.mil/api/asm/mdaplist.html).

Systems Acquisition for Contracting Personnel Course Draws to a Close

WILSON SUMMERS IV

Recently, as I prepared to make a presentation to the last Systems Acquisition for Contracting Personnel Course (SACPC) at the Defense Systems Management College (DSMC), I realized that a decade had passed since DSMC first originated the course, and that the College could now count over 2500 contracting professionals as graduates of this level III course. Since this was the only course for contracting personnel that DSMC offered, the faculty will miss the opportunity to exchange ideas and opinions with this concentrated contracting target audience.

Background

In December 1986, DoD Directive 5000.48, established training requirements for all contracting personnel (DoDD 5000.52 replaced 5000.48 in 1988). In January 1987, Eleanor Spector, [then] Deputy Assistant Secretary of Defense for Procurement, directed that DSMC develop a course to satisfy a level III requirement for those contracting personnel working on major weapon systems.

The goal was to provide contracting officers, contract negotiators, contract administrators, procurement analysts, and pricing analysts an overall understanding of major systems acquisition and management as well as advanced application of contracting competencies. Since most of their contract education and training centered on contracting competencies, DSMC's SACPC afforded contracting professionals the opportunity to broaden their appreciation and understanding of the other functional disciplines involved in the acquisition process.

Under Spector's direction, the course was designated as *mandatory* for con-

The SACPC has gone through numerous changes over the years but never lost sight of the original intent of broadening the acquisition systems perspective of contracting personnel.

tracting officers within one year of assignment to a major program and *desirable* for all others.

In the summer of 1989, the College conducted a pilot offering with scheduled offerings starting in 1990. Due to

the high demand for this course and the backlog, DSMC began offering two 30-person classes, seven times a year.

Transition

During the summer of 1996, Army Brig. Gen. Richard A. Black, DSMC Commandant, proposed to Spector the idea of including the Intermediate Systems Acquisition Course (ISAC) as a certification requirement for those contracting personnel working in major systems.

This more active participation of the contracting community, in what DSMC considers as the flagship course for Integrated Product Teams (IPT), would not only enhance the professional development of the contracting students but would also enrich the course for the other students. Spector's subsequent acceptance of this proposal negated the need for continuing the SACPC.

Reflections

The SACPC has gone through numerous changes over the years but never lost sight of the original intent of broadening the acquisition systems perspective of contracting personnel. The College would like to thank the distinguished guest speakers for supporting this course, the various course directors that ensured its success, and all the graduates that made it an enjoyable learning experience.

Editor's Note: Summers is currently the Contract Management Department Chairman, Faculty Division, DSMC. First assigned to DSMC in 1986, Summers previously served as a Contract Management Professor, Course Director, Department Chairman, and Associate Dean, Academic Programs Division.

DISTANCE LEARNING TO

Distance learning has earned the financial backing from Army leadership, and is on its way to becoming a "way of doing business."

The current Army program earmarks about $55 million a year from fiscal year 1998 through fiscal year 2003 to establish distance learning centers and classrooms and develop courses. It is part of a plan to create a distance learning system by 2010 that will serve the Army in the United States and overseas.

"By then it's just going to be a way of doing business," said Lt. Col. Steve Rodis, Chief of the Army Distance Learning Program Branch in Training and Doctrine Command's Deputy Chief of Staff for Training organization.

"It is a logical, sequential way that we've evolved to get the Army into the 21st Century and to maximize the use of training technologies."

By 2010, there will be 745 classrooms at more than 200 sites, able to teach 525 courses to soldiers virtually at their home stations. But most of that system will be completed in the first five years, with 625 classrooms in operation.

Arriving at the goal will entail much work and planning. TRADOC, however, has already laid the groundwork for the distance learning system without waiting for Army funding. According to Rodis, Gen. William W. Hartzog, TRADOC commander, has committed money over two years for pilot projects and course development.

The effectiveness of distance learning has been proven by satellite-transmitted training to soldiers deployed on peacekeeping missions. Primary Leadership Development Course classes have been made available to soldiers in the Sinai so they can continue their military education to remain current with their counterparts throughout the Army.

Soldiers on duty in Bosnia also receive professional training through distance learning.

"We're trying to make training seamless between the operational and training sides of the house," Rodis said. "A soldier, even though he is deployed, will still have access to the training environment."

Military and college-level courses are ideal distance learning material for soldiers on peacekeeping duties. But distance learning can be valuable in full combat situations, such as Desert Storm. Critical training, such as language refresher, can be given to individuals right in the area. Maintenance solutions can be beamed directly from a motor pool or aviation center in the U.S. to mechanics in the theater.

BECOME "WAY OF DOING BUSINESS"

Battle Staff NCO Course training has also been delivered to soldiers at Fort Lewis, Wash.; Fort Hood, Texas; and Fort Bragg, N.C., from the Sergeants Major Academy at Fort Bliss, Texas. The resident version of the course is six weeks and two days. Distance learning training reduced resident time to one week. That week, Phase III, is a command post exercise.

"They're even taking a look at Phase III, after developing more expertise in simulation, and considering doing the entire course by distance learning," Rodis said.

Training officials from all Army major commands have identified an initial number of courses they need for their soldiers. TRADOC schools will develop the courses. A priority ranking of courses over the five-year period has been devised.

"About 40 percent of the courses will be for reserve component MOS [military occupational specialty] reclassification," Rodis said. "The [U.S. Army] Reserve really signed up for this. Distance learning will help them accomplish their mission because they have a limited amount of dollars and a limited amount of training days."

The Army Training Support Center at Fort Eustis, Va., created an organization that teaches course developers how to make lesson plans for distance learning formats.

The distance learning plan recommends a desired mix of media for the training, but the schools, as the training experts for the military occupational specialties, determine the best delivery media. Training may be done entirely by video teletraining, CD ROM, computer-based training, text, or by a combination of all media.

Distance learning classrooms will be linked to a Digital Training Access Center (DTAC) maintained at each TRADOC training center. An artillery soldier at any classroom anywhere in the Army will be linked to the DTAC at Fort Sill, Okla., to get to the information he needs. That link will be transparent to users, Rodis said.

Distance learning may even be available to soldiers who aren't near a center. The plan is to give embedded systems in equipment in the future Army, such as tanks and Bradley Fighting Vehicles, the capability of plugging into the distance learning network.

The distance learning network has been classified as a major system. That means that development plans have to be approved by the Major Army Information Systems Review Council. For the first time, a program manager has been assigned to DCST [Deputy Chief of Staff for Training organization] to ensure milestones are met so the approved funds are released to TRADOC.

"We are very well positioned to make distance learning a reality in the Army," Rodis said. "The leadership has recognized that distance learning is an extremely efficient, reliable method of training soldiers in an era of scarce resources."

OFFICE OF CONGRESSIONAL AND PUBLIC AFFAIRS

For Immediate Release   August 5, 1997

GLISSON RETURNS TO DLA AS NEW AGENCY DIRECTOR

Lieutenant General Henry T. Glisson, U.S. Army, assumed command of the Defense Logistics Agency — a 46,000-employee Combat Support Agency — on July 25, 1997. Acting Under Secretary of Defense for Acquisition and Technology Noel Longuemare presided over the Assumption of Command ceremony held at DLA Headquarters, Fort Belvoir, Va. Prior to coming to DLA, Glisson served as the 44th Quartermaster General of the Army and Commandant of the United States Army Quartermaster Center and School in Fort Lee, Va.

A career Army logistician, Glisson was commissioned through the Reserve Officer Training Corps at North Georgia College. In his 30-year career, Glisson has seen combat in Vietnam and has served in critical command and staff assignments throughout the United States and abroad. During a previous tour at DLA, he served as Commander of the Defense Personnel Support Center, Philadelphia, Pa.

His decorations include the Defense Superior Service Medal, the Legion of Merit with five Oak Leaf Clusters, the Bronze Star Medal with "V" Device, the Purple Heart, the Meritorious Service Medal with four Oak Leaf Clusters, the Army Commendation Medal, the Air Medal, the Combat Infantryman Badge, the Parachutist Badge, the Parachute Rigger Badge, and the Army Staff Identification Badge.

Editor's Note: The DLA Office of Congressional and Public Affairs is located at 8725 John J. Kingman Road, Suite 2533, Fort Belvoir, Va., (703) 767-6200. As the buying agent for all branches of America's military services and a number of federal organizations, DLA annually purchases and distributes nearly $11 billion of food, clothing, medical supplies, construction supplies, spare parts, electronics, and fuel. Its Defense Contract Management Command supervises the completion of more than 370,000 contracts per year — worth more than $950 billion — by private companies for the military services and federal organizations.

THE WHITE HOUSE

Office of the Vice President

For Immediate Release September 30, 1997

STATEMENT OF THE VICE PRESIDENT
ON NEW FEDERAL PROCUREMENT REGULATIONS

The federal procurement regulations we are announcing today represent a victory for the taxpayer over bureaucracy.

Today's Federal Register contains the long-awaited rewrite to Part 15 of the Federal Acquisition Regulation with regard to negotiated procurements, a step first recommended by the National Performance Review. The new regulations will enable vendors and government agencies to have more meaningful exchanges of information much earlier in the process, when the benefits of such exchanges are the greatest. Further, the new Part 15 institutes a number of steps to make government practices more closely resemble those used by successful firms when they buy goods and services.

In streamlining the acquisition process, the Administration was careful to ensure that the impartiality Americans expect in their procurement system remains as an overarching requirement in every purchase the government makes. In addition, the rewrite carefully refrained from instituting any procedures that could result in any competitive disadvantage to small businesses.
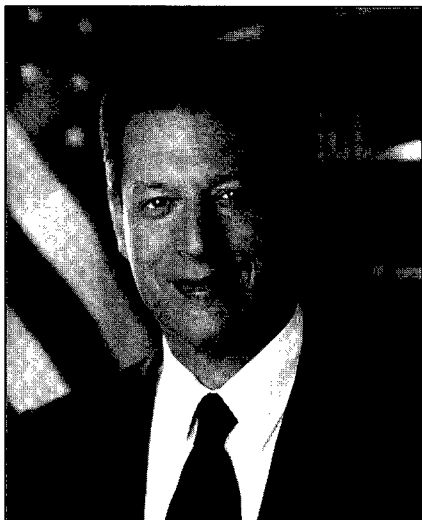
Today's announcement represents our most recent effort to create a less-regulated environment that emphasizes empowerment and flexibility, ends many unnecessary regulatory requirements, fosters competitiveness and commercial practices, and shifts to a new emphasis on choosing "best value" goods and services.

Editor's Note: This press release is available for public consumption on the World Wide Web at **http://library. whitehouse.gov/PressReleases**. To read more about the FAR, Part 15 rewrite, access **http://www.deskbook. osd.mil.**

Paper-Driven Systems Out by 2002

THE DEPUTY SECRETARY OF DEFENSE
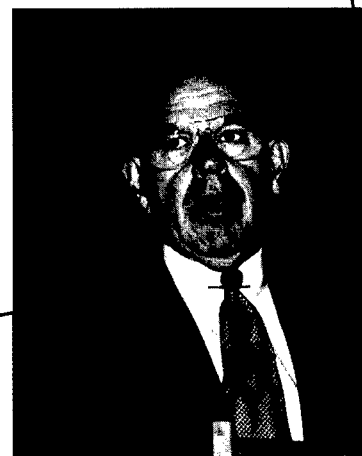**WASHINGTON, D.C. 20301-1000**

JUL 2 1997

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN, JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
DIRECTOR, DEFENSE AGENCIES

SUBJECT: Policy for the Transition to a Digital Environment for Acquisition Programs

The Department has made substantial progress in the acquisition, management, and use of digitized information. It is now time to move forward to a fully digital environment in all acquisition program and support offices. Industry has already demonstrated that this is not only possible, but preferable to traditional paper-driven systems. I am setting a corporate goal of digital operations being the method of choice for all acquisition management and life cycle support information. By the end of 2002, the overwhelming majority of DoD acquisition and logistics operations should be based on digital methodologies and products.

The focus of this effort must be at the program office level. Consistent with the architecture established by the joint DoD level executive steering group, Program Managers shall be responsible for establishing a data management system and appropriate digital environment that allows every activity involved with the program throughout its total life-cycle to exchange data digitally.

I am counting on your support for this critical initiative that will enhance acquisition reform, further empower our Integrated Product Teams, and combine with electronic commerce to achieve greater efficiencies in the weapon system life cycle.

[signature]

On July 2, 1997, [then] Deputy Secretary of Defense John White signed the Department's landmark "Policy for the Transition to a Digital Environment for Acquisition Programs." On July 15, 1997, the Acting Under Secretary of Defense (Acquisition and Technology), R. Noel Longuemare, signed a follow-up memorandum providing additional guidance for this critical initiative.

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-3010

ACQUISITION AND
TECHNOLOGY

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN, JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
DIRECTOR, DEFENSE AGENCIES

JUL 15 1997

SUBJECT: Guidance for the Transition to a Digital Environment for
Acquisition Programs

In his July 2, 1997 memorandum entitled "Policy for the
Transition to a Digital Environment for Acquisition Programs," the
Deputy Secretary of Defense set a corporate goal of digital
operations being the method of choice across our community by the
end of 2002. He further stated that the overwhelming majority of
DoD acquisition and logistics operations are expected to be based
on digital methodologies and products by that time. I strongly
support the Deputy Secretary of Defense in this critical
initiative.

To enable the smooth implementation of the Secretary's policy,
the Director, Acquisition Program Integration, shall augment the
Integrated Program Management Initiative Executive Steering Group
(IPMI ESG) with representatives experienced in implementing a
digital environment. As a minimum, the Service Acquisition
Executives, Assistant Secretary of Defense for Command, Control,
Communications and Intelligence, and Deputy Under Secretary of
Defense for Logistics will be represented. The ESG will coordinate
cross Component activities, develop any additional guidance deemed
necessary for achieving digital program office operations and
report progress to the Defense Systems Affordability Council.

Attachment (1) provides the additional implementation guidance
which was originally coordinated with the policy memorandum.

Attachment:
As stated

R. Noel Longuemare
Acting Under Secretary of Defense
(Acquisition and Technology)
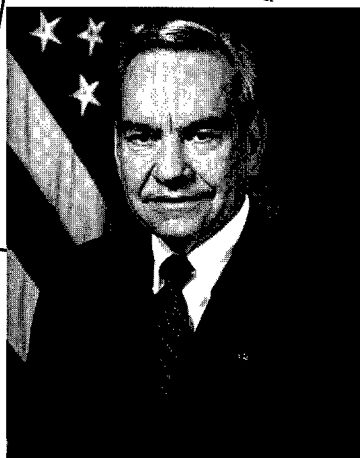
Editor's Note: To obtain a copy of the attachment referred to in Acting Under Secretary Longuemare's memorandum, contact the DSMC Press, Commercial: (703) 805-2892; DSN 655-2892.

Rapid Response — An Innovative Contract Mechanism Model

Sustaining Manufacturing Affordability

TERRY PHILIPPI • OSCAR GOMEZ

An innovative mechanism achieves quick turnaround contractual authorization for small tasks requiring immediate action. Referred to as "Rapid Response," it provides short-term and immediate technical assistance to weapon system primes and precision gear manufacturers.

The Rapid Response mechanism evolved directly from a request the Instrumented Factory for Gears (INFAC) received from Bell Helicopter Textron, Inc., Fort Worth, Texas, to provide immediate technical assistance for a research and development (R&D) experiment they were in the midst of conducting. Bell needed an answer promptly, and INFAC needed a quick way to respond within the structure of the contract.

INFAC's sponsor, the U.S. Army Aviation and Missile Command (AMCOM), and the INFAC contractor worked together to devise a method that provided the flexibility that INFAC needed while allowing AMCOM to maintain programmatic control. INFAC is operated by the IIT Research Institute (IITRI), a wholly owned subsidiary of Illinois Institute of Technology (IIT), in Chicago, Ill. The U.S. Army Manufacturing Technology (ManTech) Program provides sponsorship.

ManTech is the broad discipline that develops or improves processes on the factory floor that enable the production of the products that constitute military weapons and equipment. More specifically, the ManTech discipline encompasses the development of manufacturing process technologies and business practices necessary for a sustainable industrial base for the production of high-quality, affordable Army material.

Evolution of Rapid Response

According to Wayne Scott, Chief Manufacturing Engineer at Bell Helicopter Textron, "I was familiar with INFAC and their goals...and was quite familiar with their shop...on the campus at IIT. We needed help in a couple of different projects — prototype parts for some development activities — and talked with INFAC about the possibility of doing that work in their facility, where we could minimize the impact to our production facility here.
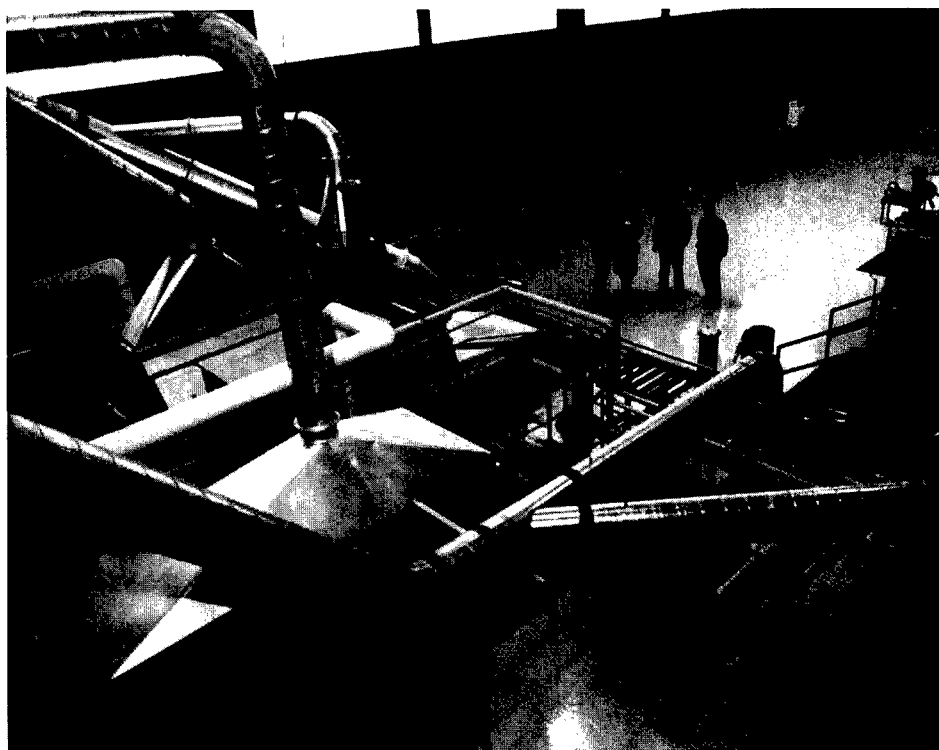
View of the main shop floor, Instrumented Factory for Gears (INFAC), Illinois Institute of Technology (IIT) Research Institute (IITRI), Chicago, Ill.

Philippi is the Manager, Industrial Extension, Manufacturing Technology Department, Instrumented Factory for Gears (INFAC), Illinois Institute of Technology (IIT) Research Institute (IITRI) in Chicago, Ill. Gomez is an Aerospace Engineer with the U.S. Army Aviation and Missile Command (AMCOM), Redstone Arsenal, Ala. He is also the AMCOM Project Engineer for the INFAC Program.

"...Their charter," Scott said, "is to advance the state of art of manufacturing gears, so consequently they have some of the gear equipment that is needed...on some development work we were doing."

According to Dr. John Cesarone, INFAC Program Manager, IITRI, "Someone such as Wayne Scott would come to me...and say, 'I really need something done quick,' and it might be one month's worth of work, but if I want to do it, I have to go to the Army, write up a statement of work, and go through the entire approval process. By the time we get it approved, the company has either lost interest or had to settle for a suboptimal approach to solving the problem. INFAC has lost the window of opportunity to support Army supply needs."

Essentially, Rapid Response allows the INFAC contractor to perform small tasks for DoD precision gear producers, practically on an "as received" basis, without going through an extensive and cumbersome contracting process. Typically, the client for Rapid Response would be an organization that currently is or has been an INFAC industry partner for other experimental activities.

The Army has established a separate Contract Line Item (CLIN) for the Rapid Response Program, with an available funding threshold for providing INFAC support to these types of projects. "We would put a certain amount of money aside in a little funding CLIN," said Cesarone, "and the government would give us, as the program managers, the authority to make a snap judgment if a project is within scope.

"According to the subcontract that lets us do this, they have the right to call us back and say, 'No, we do not think that is within scope — stop'; but we still have the right to be reimbursed for any cost that we incurred. So everyone is protected.
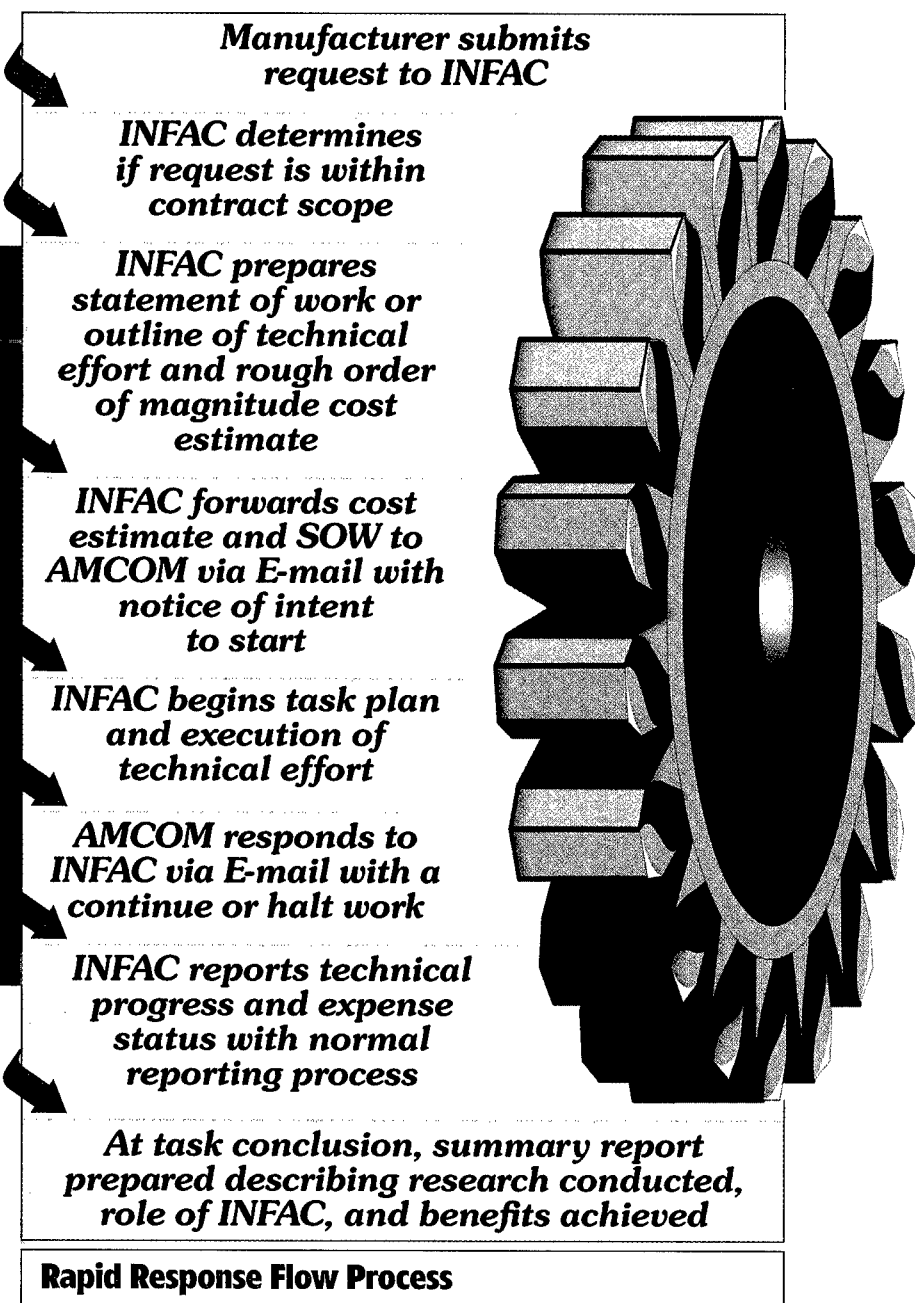
"To date it has never happened...as contractors we have a very good rapport with our government customer to agree on what is good and bad, what's not appropriate, etc."

Rapid Response Specifications

The primary criteria for accepting tasks under Rapid Response follow:

- The task must be within the INFAC scope of work.
- The total cost of an individual task must not exceed $15,000.
- The funding must be currently available within the CLIN.

The flow chart on the first page of this article illustrates how the process works. Initially, INFAC receives a request for technical assistance from a manufacturer and determines if the request is within their contract scope. If so, the next step is to prepare a technical plan and a rough estimate of the cost. If the project is within the INFAC program objectives and cost ceiling, INFAC forwards the information to AMCOM via E-mail, and prepares an experimental plan to initiate the project. AMCOM then responds, also via E-mail, with direction to continue or stop work.

Rapid Response Flow Process

Manufacturer submits request to INFAC

INFAC determines if request is within contract scope

INFAC prepares statement of work or outline of technical effort and rough order of magnitude cost estimate

INFAC forwards cost estimate and SOW to AMCOM via E-mail with notice of intent to start

INFAC begins task plan and execution of technical effort

AMCOM responds to INFAC via E-mail with a continue or halt work

INFAC reports technical progress and expense status with normal reporting process

At task conclusion, summary report prepared describing research conducted, role of INFAC, and benefits achieved

Reporting of technical progress and status of expenditures must meet INFAC reporting process guidelines. By definition, a short-term project should take three to 18 weeks to complete. At the conclusion of the task, a summary report describes the research conducted, what the role of INFAC was, the technical results, and the Army benefits achieved.

Within the INFAC scope of work, the requirements for manufacturing technology tasks encompass the entire spectrum of precision gear manufacturing technology. The program achieves a balance of application-oriented work directed at solving immediate problems, and generic research directed at increasing the stock of knowledge concerning gear manufacturing processes.

Many excellent reasons might motivate a manufacturer to seek the help of INFAC through Rapid Response: experience and technical expertise of the INFAC staff tops the list. As part of the Manufacturing Technology Department of IITRI, the INFAC staff has been conducting R&D for the gear and aerospace industries for over 20 years.

A particular strength of the INFAC team at IITRI is an in-depth understanding of not only the technical problems of DoD precision gear manufacturers, but an understanding of the operational issues as well. The INFAC program has been responsible for the factory-wide modeling and simulation of seven precision gear plants. INFAC's staff are familiar with the shop floors of over 50 North American gear producers and over 20 off-shore producers.

Another key advantage of the INFAC Rapid Response Program to industry is that it provides an unbiased and objective source of experimental data. Also, it provides use and access to equipment or resources that may not be available internally to a company. R&D assets are often unavailable within a factory environment dedicated to

Rapid Response allows the INFAC contractor to perform small tasks for DoD precision gear producers, practically on an "as received" basis, without going through an extensive and cumbersome contracting process.

production. Rapid Response is a great way to support and facilitate concurrent engineering for weapon system production without interruption of day-to-day operations.

INFAC can offer Rapid Response users both physical testing capabilities of the INFAC shop-floor and facility manufacturing engineering "know-how." INFAC engineers can draw upon their R&D and manufacturing experience to provide assistance in the development, routing, and anticipated results of using a particular gear manufacturing process or process sequence.

Examples of the types of technical assistance INFAC might provide include several diversified areas:

• Assistance in Pre-Production Process Development
• Rapid Fabrication of Prototype Parts
• Prototype Development
• Providing Independent Validation and Documentation of a New or Established Manufacturing Process

• Characterization of Either Conventional or Advanced Materials
• Verification of Testing

Still other types of manufacturing operational assistance might include providing help and engineering support in the following areas:

• Data Analysis
• Internal Training
• Process Modeling
• Fixture Design
• Material Selection
• Process Planning
• Analysis of Gear Manufacturing Operations for Application of INFAC Technology

Within the first year of the Rapid Response mechanism, INFAC successfully completed several tasks. These tasks included the development of prototype parts in support of two R&D experiments and the analyses of three DoD gear manufacturing process issues.

INFAC's Technical Advisory Board members include representatives from each of the four Army helicopter primes and key Army precision gear suppliers. The Board members are personally familiar with this innovative program, which could serve as a model for similar organizations.

Model Program
According to Ronnie Chronister, Chief of the Manufacturing Technology Division at the U.S. Army Aviation and Missile Command, Redstone Arsenal, Ala., "It's a good mechanism to link the...manufacturing technology development...to some application. I think it's a good concept. The way it's worked up to now has been that, generally, projects are one to...three years...before we can actually apply them on the manufacturing floor.

"This is going to allow us...to better meet the needs of our customers...the PMs, and allow us to be more of an...influence in the affordability of the weapons system. ...That's the whole point of the programs to develop manufacturing technology...make weapons

systems more affordable. That's what we are trying to do in the ManTech world...become a pillar of affordability for weapons systems and their development.

"I...think that the benefits that come out of this Rapid Response program will give ammunition to developing sources of funding to develop similar types of programs for other projects. It could be used as a model."

Advising others interested in using Rapid Response as a model, Cesarone said, "I would say if someone else wanted to try this mechanism on another contract, the way we structured it you really can not get hurt. The fact that we know them well, and they are willing to trust us enables the project to happen, and perform, and go on to conclusion quickly. If that broke down, if someone tried this and the contractor really did not understand the customer's needs or the customer did not quite trust the contractor, no one would get hurt, because the whole Rapid Response program mechanism has safeguards in it.

"If I guessed wrong and started a project they didn't like me to do, or if they didn't trust me and thought I was doing it for the wrong reason, either way they could say 'No, don't proceed on this,' and their exposure is minimal. I send them an E-mail on the day that I start. If they got it that day and did not like it, they could tell me to stop and the most they would be exposed for is one day's worth of labor. I would not be at risk for that, because I know I am reimbursable until they tell me 'no.'

"So, neither of us is risking much. If somebody wanted to try this sort of thing, that is the worst that could happen. If that happened once or twice, hopefully it would be a learning experience, and they would develop that rapport where they would never have an aborted start. We have been lucky that we have never had an aborted one at all, because we did not do this until we had a good rapport.

"I would say this mechanism works as long as a contractor fully understands the real needs of his client," said Cesarone, "...and if the government client fully trusts the judgment of the contractor."

"The big thing, absolutely, is communication." According to Scott, "...When they run into problems in the development phase of these things, the communication coming back needs to be very quick. That way both parties can respond to the difficulties quickly."

Cesarone agrees, and adds, "I would say communication at a high level. I think the government and their contractors on large programs have very good communications at a low level, meaning they send lots of E-mail back and forth, lots of letters, statement of work, and...tons of paper. But they rarely achieve a meeting of the minds.

"...I have people in their factories all the time from my shop. Our job is to know their needs, and we're always going out there and making this an offer to them." We remind them about this mechanism and they love it...I would say that everyone I have dealt with has been very positive about it."

"Our project was successful," said Scott. "We were very pleased with the results of it. We had some start-up problems, and some communications problems. Once we were able to get all that lined out, we were very happy with the program...being able to look at some development activities, relative to some prototypes, very quickly."

Working Together Pays Off

In summary, the INFAC program plays an important role in ensuring a viable supply base to support both the sustainment of current weapon systems and the manufacturing affordability of future systems. The Rapid Response Program is just one example of how INFAC and AMCOM Engineering are working closely with the DoD supply base to help meet the challenges of fleet sustainment and weapon system affordability.

Acting DDR&E Announces Senior Leadership Appointment

George T. Singley III, Acting Director, Defense Research and Engineering (DDR&E), Department of Defense, recently announced the appointment of Dr. Robert J. Trew to the DDR&E Pentagon staff, effective August 17, 1997.

Trew is a newly appointed Senior Executive Service member, and is serving as the Director for Research. He brings a wealth of knowledge and expertise to the Department of Defense (DoD) from his extensive accomplishments as an active researcher for over 25 years, extensive involvement in university and government issues, and numerous peer-reviewed publications and patents. A member of many professional societies, Trew is also a Fellow of the Institute of Electrical and Electronics Engineers (IEEE).

As a member of the DDR&E Pentagon staff, Trew will play a key senior leadership role in DoD's science and technology program.

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QUARTERLY

VOL 4   NO. 3

Help the Marine Corps

Brighten the 1997 Christmas Holidays for Needy Children
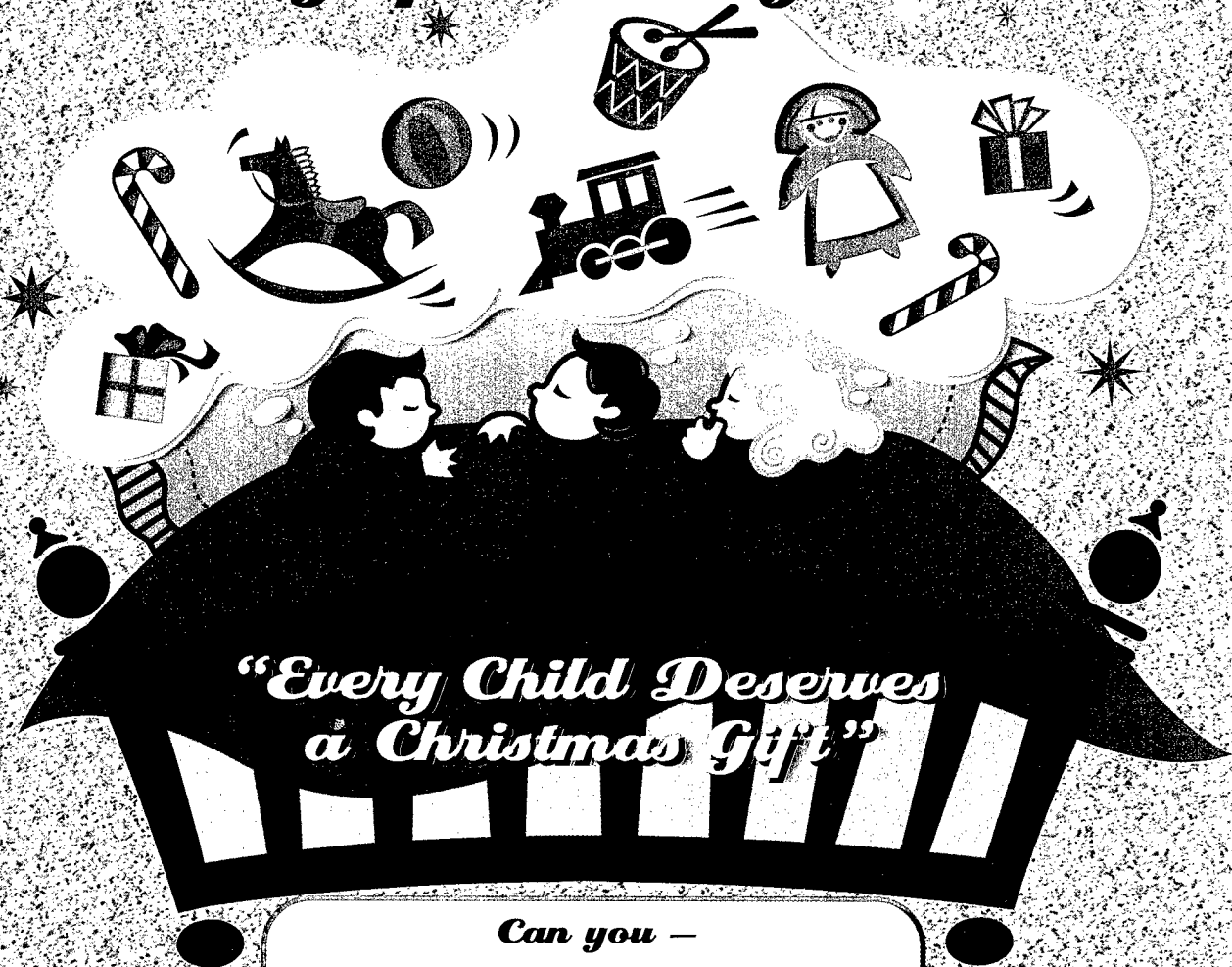
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Provide a toy collection site?
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Promote the campaign in your organization?
Donate an item for a fund-raising raffle?
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Quantico, Virginia 22134-5004

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Winners of DoD Life Cycle Cost Reduction Award Announced

October 7, 1997

Deputy Secretary of Defense John J. Hamre announced on Oct. 2, 1997, the recipients of the second annual Life Cycle Cost Reduction Award. The awards were presented during opening ceremonies for the Department of Defense Logistics Reform Focus Day held at the Pentagon.

Assistant Deputy Under Secretary of Defense for Corporate Logistics Lou Chaker said that more than 50 nominations were received for the award this year which was established to recognize the success that people — thinking in innovative ways — undertook to reduce life cycle costs. One project was chosen from each of the military services, the defense agencies, and one from industry to be the recipient of the award for their component. The project receiving the highest score was awarded the overall DoD Life Cycle Cost Reduction Award.

The 1997 awardees are:

- **Defense Supply Center Richmond** — The center's New Component Design Team received the overall DoD Life Cycle Cost Reduction Award for cutting the life cycle cost of a mine field marking system by more than 70 percent, saving about $6 million over the next 10 years. The minefield marking system is used by the Army and Marine Corps to mark the perimeter and the safe lanes of mine fields. The old design had a long procurement lead time and high cost associated with obtaining obsolete electronic circuitry. Richmond's team redesigned the item using commercial off-the-shelf components.

- **Army Javelin Program** — Javelin program leadership developed cost reduction plans that reduced acquisition time from 14 to 11 years, saving approximately 30 percent or $1.4 billion over the life of the system.

- **Office of Naval Research** — This team developed a solution to reduce excessive wear of the friction drums located inside the Navy standard hauling winch. Their innovations increased safety and eliminated the use of asbestos.

- **Air Force Materiel Command Lean Logistics Team** — This group reengineered organic and contract commodities repair processes as well as aircraft depot repair and modification procedures which resulted in more aircraft available to the warfighters.

- **Hughes Air Warfare Center Sustainment and Supportability Engineering Team** — The industry recipient was responsible for development of Nested Technology, a focused systems analysis and solution program for the selected sustainment of existing technology and insertion of new technology into weapon systems.

Editor's Note: This information is in the public domain on the World Wide Web, and may be accessed from the DefenseLINK News Home Page (**http://www.dtic.dla.mil/defenselink**).

Col. Thomas Singleton, U.S. Marine Corps, Named ACTD Manager of the Year

For Immediate Release   October 17, 1997

Col. Thomas J. Singleton, U.S. Marine Corps, was recognized as the Advanced Concept Technology Demonstration (ACTD) Manager of the Year. Col. Singleton, who is Special Assistant for Marine Corps, Office of Naval Research, and Manager, Joint Countermine ACTD, is the second recipient of this award, which Joseph Eash III, Deputy Under Secretary of Defense (Advanced Technology) presented on Sept. 30, 1997, at the Second Annual ACTD Managers Conference at Fort Belvoir, Va.

As Joint Countermine ACTD Manager for the Navy, Col. Singleton showed dynamic and innovative leadership during the successful first phase of the demonstration in September 1997 at Fort Bragg and Camp Lejeune, N.C. He coordinated amphibious mine countermeasure operations from sea to land, using integrated, clandestine surveillance and reconnaissance from space, surface, and subsurface platforms.

Many countermine sensors were tested during the first demonstration of the Joint Countermine ACTD. Participants included the U.S. Army Communications-Electronics Command, the Office of Naval Research, and Marine Corps Systems Command, working to rapidly transfer technology from developers to users. The demonstration's purpose was to evaluate military technologies before committing to a major cost for production and to develop operating procedures for employing the new technologies. The first ACTD was an operational scenario with a shallow water, beach, and land emphasis. Nine "novel" and interconnected systems with supporting communications were evaluated.

Col. Singleton, his support staff, and Mike Jennings, Army Demonstration Manager, and his staff accomplished the decisive integration of the following nine novel systems: infrared and visible Littoral Remote-Sensing, Magic Lantern blue-green laser imaging reconnaissance, airborne infrared minefield detection, multi-spectral optical reconnaissance and analysis of the coastal battlefield, autonomous vehicles for explosives neutralization, tele-operated mine rakes and explosive nets, side sweeping Power Blade and ground penetrating man portable mine detectors, seismic and acoustic off-route clearance devices, and classified standoff capabilities.

ACTDs play a significant role in revolutionizing the DoD acquisition process to adapt to today's economic and threat environments. With the demise of the Soviet Union, the emphasis for the United States has shifted from the global conflict to the regional conflict. Some of the recent regional conflicts have been the Persian Gulf War, the conflict in Somalia, Mombasa, and the support of Tomahawk strikes against Iraq. Focusing on the littoral area, Navy and Marine Corps forces must be able to seize and defend advanced bases — ports and airfields — to enable the flow of land-based air and ground forces, while providing the necessary command and control for joint and allied forces. The goal of this Navy mission is to have the ability to dominate and exploit littoral battlespace during the earliest phases of hostilities.

Editor's Note: This news release, published by the Office of Congressional and Public Affairs, Office of Naval Research, Arlington, Va., is in the public domain and may be accessed from the Office of Naval Research Home Page (**http://www.onr.navy.mil**) on the World Wide Web.

FBI Uses Unique Application of Award Fee Incentive

Additional Award Fee Pool Encourages Commercial Competitor Cooperation at Program Level

ALAN L. STONE

Since the inception of the Federal Bureau of Investigation (FBI) in 1908, identification of individuals by fingerprint has been a top priority. As our country grew, demand for identification of individuals also grew. Today, the FBI's Criminal Justice Identification Services (CJIS) Division in Clarksburg, W.Va., receives more than 50,000 identification requests each day.

Some Progress... But Still Far to Go

The Clarksburg facility receives these requests on fingerprint cards – roughly half are criminal arrest cards (individuals who were recently arrested); and the remaining half are civil application cards (individuals applying for jobs requiring criminal arrest background checks, e.g., bank officials, police officers). Despite significant progress in automating the fingerprint process in the 1970s and 1980s, fingerprint identification remains a relatively slow, labor-intensive process.

In the early 1990s, the Bureau initiated development of a more robust automated fingerprint identification system. Called the Integrated Automated Fingerprint Identification System (IAFIS), FBI systems developers formed this major automated data processing development program under General Services Administration "Trailboss" guidelines, with delegation of procurement authority to the FBI.
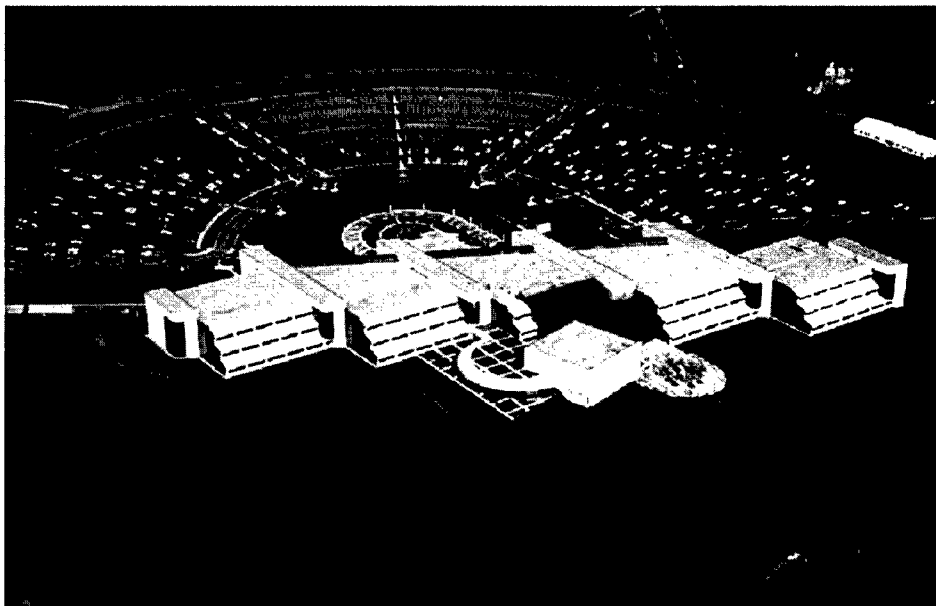
FBI Complex, Clarksburg, W.Va.

Cooperation Key to Acquisition Strategy

The acquisition strategy used a tailored MIL-STD-2167A scheme. Initially, the FBI, as "prime contractor," awarded the three major components of IAFIS competitively. After reviewing the contract proposals, they selected Lockheed Martin Information Systems, PRC Inc. [now Litton/PRC], and Science Applications International Corporation (SAIC) as the major segment contractors. However, these selections presented the FBI with a dilemma: how does a program or project manager persuade three fierce commercial competitors to cooperate with each other – and the FBI – when

it is not necessarily in their best commercial interests to do so?

Further compounding the problem, the FBI subsequently selected another Lockheed Martin entity to assist with integrating the three-segment contractor deliveries into a system.

FBI Fingerprinting - A Labor-intensive History

Today's fingerprint identification process sometimes takes months from the arrest to an identification decision. In some cases, the arresting law enforcement official may release an individual, only to learn upon receipt of a completed, positive identification

Stone is a supervisory computer engineer assigned to the FBI Complex, Clarksburg, W.Va. He is retired from the U.S. Air Force and is a former DSMC Professor of Systems Engineering.

that the individual is wanted by law enforcement officials in another state. Designed to provide identification in hours rather than months, IAFIS gives law enforcement officials the capability to identify individuals long before their initial appearance before a court.

From first inception, the Bureau's systems developers agreed on the principal design requirement for IAFIS: it must provide two-hour processing of urgent, electronically submitted fingerprint identification requests (24 hours for non-urgent requests). This service alone will keep at least *10,000 criminals a year* off the streets!

Additionally, IAFIS provides federal, state, and local users with five basic services:

- **Ten-print-based identification services** provide identification (or non-identification) decisions based on a search of FBI databases. To begin a ten-print-based identification, the user provides a criminal or civil fingerprint card (or digital image of the card across an electronic network), and IAFIS generates potential candidates. An FBI fingerprint examiner then makes the identification or non-identification decision and renders that decision to the user.

- **Latent print services** provide users with case investigation and image identification services. Initially, users submit fingerprint evidence from a crime scene in photographic or electronic form, which is then matched against FBI database files. An FBI latent fingerprint specialist screens the resultant candidates and makes the identification decision.

- **Subject search and criminal history services** support requests for criminal histories for known as well as unknown subjects.

- **Document and image services** provide database update and

purge actions as well as requests for file and image information.

- **Remote search services** allow users to submit ten-print as well as latent searches against FBI database files; IAFIS then generates the search results and returns the images to users without FBI service-provider assistance. In the case of remote search services, the *user* provides the identification or non-identification decision.

The IAFIS consists of three major segments and an integrated communications element.

- **The Identification Tasking and Networking** (ITN) segment accepts fingerprint submissions and related electronic transaction requests and controls their end-to-end processing. ITN links users and FBI service providers through internal and external communications networks and provides fingerprint image storage and retrieval services. Litton/PRC, Inc., of McLean, Va., is currently developing the ITN.

- **The Interstate Identification Index** (III) segment contains the national repository of criminal history records that IAFIS will automatically search. SAIC, Inc., of McLean, Va., is currently developing the III.

- **The Automated Fingerprint Identification System** (AFIS) segment provides the primary ten-print and latent fingerprint searches against the FBI databases. Lockheed Martin Information Systems of Orlando, Fla., is currently developing the AFIS.

- **The CJIS Wide-Area Network** (CJIS WAN) provides a secure electronic communications network between IAFIS and state and federal users. The FBI developed the CJIS WAN, using commercial off-the-shelf (COTS) equipment and the FTS 2000 (Sprint) network. In addition, IAFIS will be integrated with the National Criminal Information Center (NCIC) 2000 network and the National Law Enforcement Telecommunications System (NLETS) (Figure 1).
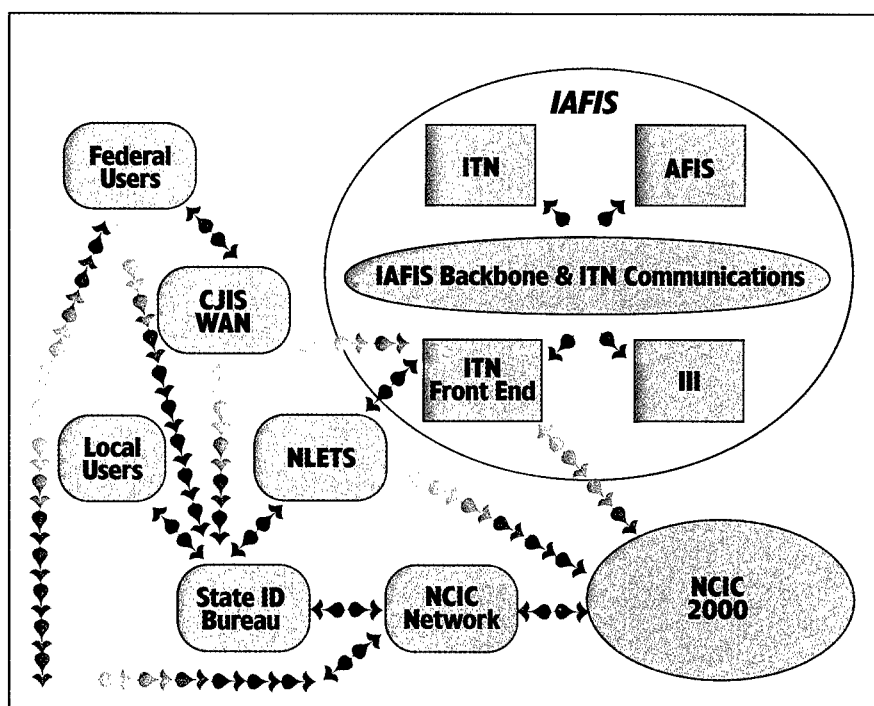

FIGURE 1. **IAFIS Architecture**

Initially, the FBI's acquisition strategy called for an initial operational capability (IOC) in 1998 and a full operational capability (FOC) in late 1999. However, as the program neared its preliminary design phase, the program team reassessed the risk of this approach.

To lower the overall development risk and slightly accelerate the schedule for FOC (now Build F), in January 1996, the team decided to change to an incremental approach with six "Builds." This change in strategy also allowed the program to deploy limited functionality earlier than originally planned in order to assist current fingerprint operations.

Of particular concern was integration of the three segments into the IAFIS, which system developers viewed as one of the most significant development risks. However, several direct actions mitigated this risk.

The program team identified and obtained the services of a "world-class" integrator (Lockheed Martin) and lowered the overall development risk by adjusting the award fee structure. The award fee action was necessary because the program office observed some hesitation to share critical information among the segment contractors. For the program to succeed, the team considered it critical to correct this perceived reluctance of competitors to share information.

Award Fee Strategy

The original award fee plans for the three segments included common criteria but adjustable weighting, depending on the development phase of the specific segment. Upon transition to multiple builds requiring coordinated integration, the program team needed some means to bring the three development programs into congruency. An additional award fee pool designed to encourage system-level effort, while simultaneously retaining emphasis on individual segment performance, ultimately achieved that end.

The changed basic criteria included segment as well as system performance in four critical areas:

- Cost Containment

- Schedule Containment

- Technical Functional

- Technical Performance

Figure 2 shows typical detailed system-level criteria used. Again, the program team used these criteria in addition to the original segment-level criteria, and brought additional money into the award fee pool.

Results

The FBI felt the impacts of these changes even before the program team formally began the proposal evaluation process, which included changes to the incremental build strategy and award fee structure. The three segment contractors (with strong encouragement from the FBI) began a fully integrated IAFIS build-development effort. With minimal technical assistance from the FBI, the segment contractors also developed their own incremental development strategy, which met all technical requirements, and simultaneously reduced development risk significantly.

While each contractor kept separate their own individual cost proposals, they fully coordinated their technical proposal development efforts. This included full interchange of information and technical specialists, as needed, to produce three, fully integrated and consistent proposals. Understandably, this greatly aided the FBI during subsequent evaluations, negotiations, and awards.

SYSTEM COST CONTAINMENT

- Providing Insightful recommendations for savings due to commonality of tasking
- Providing suggestions and accepting solutions in the best interest of the FBI
- Providing FBI and Integration Contractor representatives adequate insight into segment development
- Making available appropriate tools, staff, and data for integration and test support
- Minimizing cost impact to IAFIS resulting from rework during integration and test

SYSTEM SCHEDULE CONTAINMENT

- Delivering functionality early
- Recommending achievable schedule savings
- Providing FBI and Integration Contractor representatives adequate insight into segment schedules
- Minimizing schedule impact to IAFIS resulting from rework during integration and test
- Willingness and ability to respond to changes in the master schedule

SYSTEM TECHNICAL FUNCTIONAL

- Providing meaningful participation in IA FIS-level design reviews and integration efforts
- Coordinating technical issues with segment and integration contractor representatives
- Providing substantive and meaningful support to IAFIS working groups, trade studies, and reports

SYSTEM TECHNICAL PERFORMANCE

- Implementing processes and procedures to ensure system response-time requirements are achieved
- Implementing processes and procedures to ensure system workload requirements are achieved
- Providing substantive and meaningful support to IAFIS-level trade-off recommendations
- Providing substantive and meaningful participation in IAFIS trade studies and white papers

FIGURE 2. **System Award Fee Criteria**

IAFIS Data Center Hardware

Following formal implementation of the new award fee strategy on contract, this technical cooperation continued and even accelerated. The resultant program benefits were immediate and substantial.

• The contractors jointly developed an integrated test network to aid in software development and continued to share technical and programmatic status.

• Because of increased interchange of detailed technical information among the contractors, the program experienced an increased commonality of COTS software and hardware, including the selection of common database (Oracle), internal communications (Tuxedo), and configuration management (Clearcase) software products. These selections directly lower the support costs and ensure long-term compatibility among the segments as the COTS software products evolve over the system life cycle.

• Additionally, the segment contractors continue to share technical strategies, cooperate on mutual problems (looking for the best sys-

"As the defense industry consolidates and further implements the various commercial standards initiatives, defense acquisition programs may experience the same problem as the FBI: how to encourage cooperation at the program level by commercial competitors. "

tem solution as compared to the best segment solution), and even locate individuals at each other's facilities to ensure close technical coordination.

• The increased management and technical interchange also enhanced cooperative efforts involving interface working groups and system configuration management.

In the award fee management area, the FBI continues to encourage open communication efforts by providing monthly award fee feedback, including suggested actions needed to "hit the bell." This feedback includes both segment-specific observations and suggested actions where inter-segment cooperation and assistance would be helpful.

IAFIS continues to meet and exceed the "system level" award fee criteria (with its resultant high award fees).

Let Acquisition Reform Work For You

Implementing an additional system-level award fee structure for IAFIS significantly lowered the development risk on the program. Ultimately, the program team expects this lowered development risk to result in a fully integrated system with substantially lower life-cycle costs.

As the defense industry consolidates and further implements the various commercial standards initiatives, defense acquisition programs may experience the same problem as the FBI: how to encourage cooperation at the program level by commercial competitors.

They said it couldn't be done. But ultimately, the FBI and its IAFIS program team, through use of the innovative policies and practices promulgated by acquisition reform, sought and found a better, more effective method with demonstrated potential to "encourage" cooperation by commercial competitors.

Ahead — Choices, Changes, Challenges

GENERAL BLACK RECEIVES THE DSMC COLORS AS HE BECOMES DSMC's 13TH COMMANDANT, MARCH 1996.
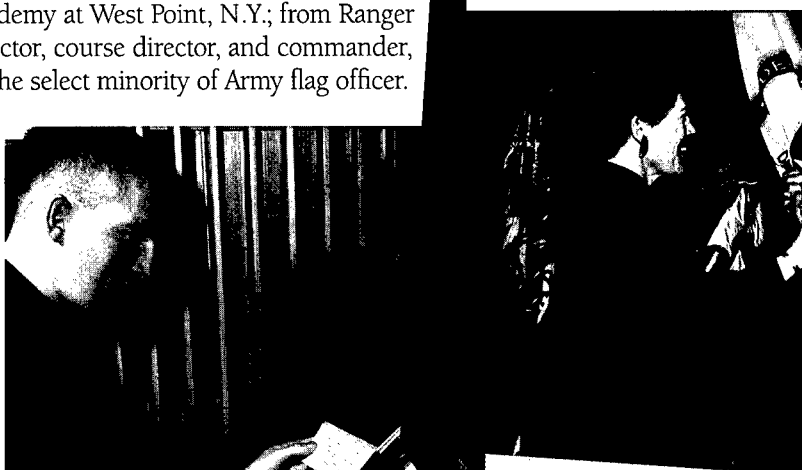
Photo by Richard Mattox

n September 1997, our DSMC Commandant, Army Brig. Gen. Richard A. Black, announced his plans for retirement after a 30-year career in the Army. What started out as an air defense artilleryman's career eventually took him from the small town of Wenatchee, Wash., to the U.S. Military Academy at West Point, N.Y.; from Ranger School, to the jungles of Vietnam; from instructor, course director, and commander, to project manager and PEO; from Army staff, to the select minority of Army flag officer.

From where we sit, the College loses the day-to-day leadership of a strong advocate, leader, professional acquisition officer, gentleman, family man, and friend as he prepares to retire from the only career he has ever known.

In addition to his normal commentary, for this issue of *Program Manager* we asked the Commandant to tell us his thoughts about DSMC and the College's ongoing initiatives and future direction. *Program Manager* is pleased to be the forum to convey General Black's last message to the acquisition workforce (AWF) as an active duty Army flag officer as well as Commandant of the Defense Systems Management College.

A VERY YOUNG CADET BLACK PRACTICES HIS KEYPUNCH SKILLS, U.S. MILITARY ACADEMY, WEST POINT, N.Y., FEBRUARY 1965.

O MÙNG QUAN KHÁCH

CAPT. BLACK PICTURED WITH AMERICAN AND SOUTH VIETNAMESE COMRADES, REPUBLIC OF VIETNAM, 1969. FROM LEFT: 2ND LT. GRILLO, SERGEANT 1ST CLASS HUE, CAPT. NGAI, CAPT. BLACK, SERGEANT 1ST CLASS TIMOTHY.

POST-VIETNAM. CAPT. BLACK RECEIVES HIS FIRST COMPANY COMMAND, OCTOBER 1971.

MANDANT RETIREMENT

From the Commandant

As we enter a new fiscal year and PPBS cycle, it seems fitting that our feature interview for this issue is with Dan Czelusniak, the Pentagon's Director, Acquisition Program Integration (API) (p. 2). For those of you now gearing up for this year's PPBS cycle, be sure to read Dan's comments on the PPBS process. He speaks from the perspective of one who has worked both sides of the house — as a PEO preparing inputs into the PPBS; and as Director, API, reviewing and approving PPBS outputs to the OSD Comptroller and Office of Management and Budget

On p. 10, Eleanor Spector, Director of Defense Procurement, graciously allows us to reprint her speech at the 5th Annual Dun & Bradstreet Conference. Speaking on the subject of "Improving and Standardizing DoD Procurement Business Processes," she focuses on the Standard Procurement System and the Central Contractor Registry (CCR) Database — two initiatives that will have a profound impact on the way we do business.

Donald Campbell, President Century Technologies, Inc., and member of our Board of Visitors, writes a very interesting Op-Ed (p. 38) on acquisition reform and its impact on small businesses' ability to successfully compete for contracts.

Once again, our College was privileged to host the Sixth Semiannual PEO/SysCom Commanders/PM Conference, October 16-17 (p. 80). This semiannual conference gathers together some of the best and brightest in the AWF: the Defense Systems Affordability Council, senior acquisition and technology executives, DoD Component Acquisition Executives, senior logistics executives, Service Program Executive Officers, System/Materiel Command Commanders, selected PMs, industry leaders, and other key DoD personnel.

Following on with the theme of the previous conference last spring, the conferees continued to explore ways of reducing total ownership costs throughout the entire system life cycle. A special highlight of the conference was a well-deserved presentation of the David Packard Award for Acquisition Excellence to Acting Under Secretary Longuemare (p. 85).

In this issue, we present a large variety of acquisition topics, ranging from basic program management skills (p. 46), to the FBI's newest Automated Fingerprint Identification System (p. 72).

On the technical side, we feature the Digitized C^2 System for Medical and Tactical Commanders (p. 13) and the Joint Tactical Information Distribution System (JTIDS) (p. 28). Other topics of interest include the Small Business Innovation Research (SBIR) Program (p. 16); an interview with our APMC defense industry students (p. 22); a legislative update on the Truth in Negotiations Act (TINA) as it affects the Federal Acquisition Streamlining Act (FASA) (p. 50); and on p. 57, a brief message from the Director of our last Systems Acquisition for Contracting Personnel Course.

Here at the College we have three important senior leadership changes to announce. Effective October 1, my Provost and Deputy Commandant, Ed Hirsch, requested to return to his former position at the College as Chair for Acquisition Management in our DSMC Executive Institute. I let him go with regret; Ed's talents and

contributions to this College may never be fully recognized or lauded, simply because they're too numerous, and most often behind-the-scenes.

Simultaneously, we selected an outstanding member of our faculty — Rich Reed, our current Dean of Faculty — to fill Ed's shoes. A search is now ongoing for our new Dean of Faculty to replace Rich.

But I'm not through yet. There's one more senior leadership position at the College that will soon change hands — mine. After 30 years of active duty, I've requested retirement effective February 1, 1998. Please indulge me while I devote the rest of this column to what I'll call my "State of the College" farewell message.

A Reputation to Uphold

DSMC deservedly has earned the reputation of being the premier institution in the world dedicated to acquisition education. This reputation is the result of the superb efforts and accomplishments of our staff and faculty over the 26 years of our corporate existence; and confirmed over and over again by the success of our graduates, both government and industry.

Our constant challenge is to maintain and enhance that reputation by continuous improvement of all of our products and services to better serve the AWF and our ultimate customers — the warfighters. That has been an enormous task during the past four years as Acquisition Reform, in statutes such as the Federal Acquisition Streamlining Act, Federal Acquisition Reform Act, and the Information Technology Management Reform Act were enacted, and the new DoD 5000-series published.

To meet that challenge demands the continued, aligned focus of all members of our staff and faculty to the objective of delivering the best education, training, research, consulting, and publication products to the AWF.

Yes, We Have a Plan...

We have developed a corporate plan that will facilitate our efforts to maintain our focus and meet this tremendous educational challenge. Our plan contains a set of six initiatives, approved by the Defense Acquisition Career Development Council (DACDC), that identifies and describes the individual steps we must take to be the education and training leader of the AWF into the 21st Century.

The future of the College depends upon our individual and collective ability to so improve our faculty as to be recognized as world-class.

Regional Operations. Increase our capability to support the Defense Acquisition University (DAU) in its course offerings to the AWF by operating teaching facilities at on-site locations. These regional education centers include the "big 10" areas with the heaviest AWF concentration: Aeronautical Systems Center; Electronic Systems Center; Space and Missile Systems Center; NAVAIR; NAVSEA; SPAWAR; Communications-Electronics Command; Tank Automotive and Armaments Command; Aviation and Missile Command; and finally, the Fort Belvoir/Washington D.C., area.

This initiative will permit us to reach more members of the AWF closer to their workplace, at significantly lower cost, reduced travel time, with fewer days away from their jobs.

Distance Learning. Exploit distance learning techniques to facilitate education to the AWF. This initiative will be coordinated with our regional efforts to deliver instruction to regional sites without incurring the cost of sending instructors to those locations by using computer-based training or Video TeleTraining (VTT).

Instruction will be provided by a variety of techniques to Information Technology-equipped classrooms, computer learning resource centers, or directly to an individual learner via the Internet.

Continuing Education. Develop, package, and deliver continuing education and training to keep the AWF current. The College, as a part of DAU, will provide course instruction, workshops, seminars, conferences, satellite broadcasts, traveling on-site teams, Internet and/or CD-ROM instructional packages, guidebooks, and other distance learning activities to support continuing education for the AWF.

Research and Consulting. Expand research and consulting to serve a greater number of customers in the AWF. The College has always provided such services to the AWF, Congress, senior members of OSD, other federal agencies, and foreign governments. To the extent resources will permit, we are committed to expanding our capability to provide these services to the AWF and other customers. Some of these services will be provided on a fee-for-service basis.

Non-DAWIA Student Base. Expand capability to offer courses to the non-DAWIA (DoD) AWF, to defense industry, and to the AWF of other federal agencies. This initiative recognizes the critical need of acquisition personnel, beyond those identified in the DAWIA legislation, for acquisition education and training.

Staff and Faculty. The measure of quality of any educational institution is the quality of its faculty and support staff. The qualifications, capabilities, and accomplishments of our personnel have been acknowledged as exemplary; however, that is history. *The future of the College depends upon our individual and collective ability to so improve our faculty as to be recognized as world-class.*

The improvement process must include highly selective recruitment efforts, seeking renowned experts in appropriate fields either as full-time, adjunct, or visiting professors; enhancing the professionalism and currency of existing faculty; and targeted hiring of faculty members with expertise in new fields required by the changing needs of the workforce.

Looking Forward

The education and training of the AWF is increasingly important as acquisition personnel and fiscal resources continue to decline. The superb people remaining in the workforce must possess the current knowledge, skills, and ability to perform their challenging tasks better and faster — not by merely working harder, but by working smarter. The overarching challenge to DSMC in the future is to provide the best possible education and training to the workforce. I have every confidence that the College will meet that challenge.

—**Brig. Gen. Richard A. Black**
U.S. Army
Commandant

DSMC Hosts Sixth Semiannual PEO/SysCom Commanders/PM Conference

"Our Job is to Give the Qualitative Edge to the Warfighters"

TERRY W. BAIN • DR. DANNY L. REED

"There's nothing really hard about reducing costs...," according to Paul Hoeper, who delivered the Conference Theme and Objectives presentation to the Sixth Semiannual Program Executive Officers/Systems Command Commanders/Program Managers (PEO/ SysCom Commanders/PM) Conference. "It's easy: you just stop spending money. The problem is, you don't get anything...when you do that...."
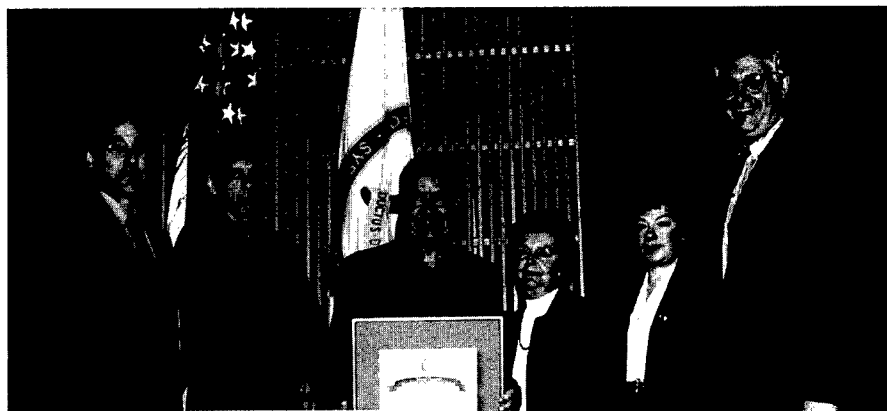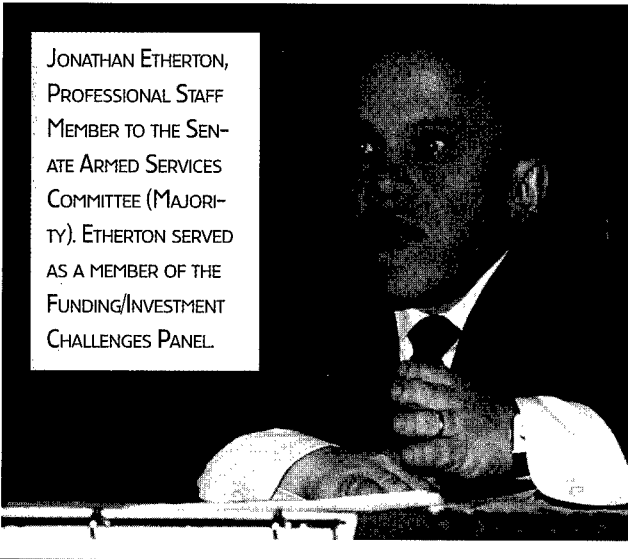
JOINED BY HIS WIFE, JULIE, AND PERSONAL STAFF, ACTING UNDER SECRETARY OF DEFENSE FOR ACQUI-
SITION & TECHNOLOGY, R. NOEL LONGUEMARE, RECEIVES THE DAVID PACKARD AWARD FOR ACQUISI-
TION EXCELLENCE FROM DEPUTY SECRETARY OF DEFENSE JOHN HAMRE. PICTURED FROM LEFT: ARMY
COL. JIM ETCHECHURY, SENIOR MILITARY ASSISTANT, AIR FORCE LT. COL. JOE PRICE, MILITARY ASSISTANT,
LONGUEMARE; WIFE, JULIE; MADDY ALDRICH, CONFIDENTIAL ASSISTANT, HAMRE.
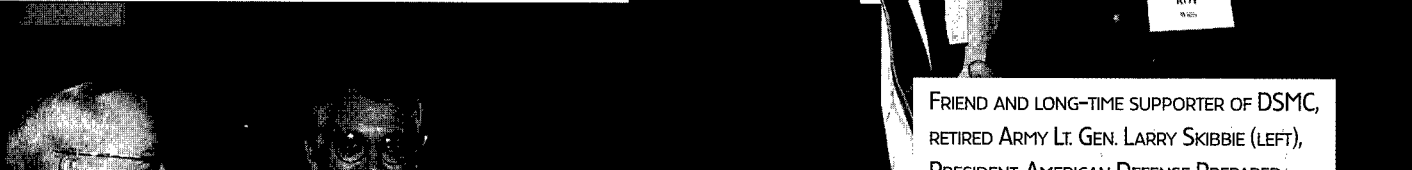
DURING A PANEL DISCUSSION, GEORGE SCHNEITER, DIRECTOR, STRATEGIC AND TACTICAL SYSTEMS,
OFFICE OF THE UNDER SECRETARY OF DEFENSE (ACQUISITION AND TECHNOLOGY) HOLDS UP A COPY
OF DSMC'S PUBLICATION, *JOINT LOGISTICS COMMANDERS GUIDANCE FOR USE OF EVOLUTIONARY ACQUISI-
TION STRATEGY TO ACQUIRE WEAPON SYSTEMS.* SCHNEITER SAID THE PUBLICATION CONTAINED THE BEST
DEFINITION OF EVOLUTIONARY ACQUISITION THAT HE COULD FIND.

Bain is a freelance writer with 22 years of professional writing experience. Currently under contract with Program Manager, Bain's experience includes technical writing, editing, computer software, and electronic graphics support for several government agencies and defense industries. He holds a B.S. in Social Science from the University of Southern Indiana and an Indiana Secondary Education Certification. Reed is a member of the Research Staff, Institute for Defense Analyses, Alexandria, Va.

Photos by Richard Mattox/Army Sgt. Richard Vigue

FRIEND AND LONG-TIME SUPPORTER OF DSMC, RETIRED ARMY LT. GEN. LARRY SKIBBIE (LEFT), PRESIDENT, AMERICAN DEFENSE PREPAREDNESS ASSOCIATION, SPEAKS WITH ROY WILLIS, ACTING DEPUTY UNDER SECRETARY OF DEFENSE (LOGISTICS).

DEPUTY SECRETARY OF DEFENSE JOHN HAMRE (CENTER) IS GREETED BY ARMY BRIG. GEN. RICHARD A. BLACK, DSMC COMMANDANT, AND DONNA RICHBOURG, ACTING DEPUTY UNDER SECRETARY OF DEFENSE (ACQUISITION REFORM) AS HE ARRIVES AT SCOTT HALL, DSMC MAIN CAMPUS, FORT BELVOIR, VA., SITE OF THE SIXTH SEMIANNUAL PEO/SYSCOM COMMANDERS/PM CONFERENCE ON OCTOBER 17.

TOM CREAN, PRESIDENT, DEFENSE ACQUISITION UNIVERSITY (LEFT) SPEAKS WITH RICH REED, PROVOST AND DEPUTY COMMANDANT, DSMC. REED BECAME DSMC'S PROVOST AND DEPUTY COMMANDANT EFFECTIVE OCTOBER 1.

mandant, DSMC, Hoeper's remarks set the tone for the conference.

Tough Decisions

"Our job," Hoeper began, "...is to give the qualitative edge to the warfighters. That's what we really need to do, and it's within that context that we have to reduce Total Ownership Costs.

"What we're facing now is a situation where, if we can't reduce Total Ownership Costs, we won't just be looking at a list of priorities where we can always afford the top priorities for things we really need. We may find ourselves, in the future, trying to figure out which essentials we can eliminate. With your help, you who are here today, in this conference, I hope that we may never see that day...," Hoeper said.

Hoeper reminded attendees that the Single Process Initiative concept grew out of comments raised during one of the breakout sessions in the fall 1995 meeting. He presented a brief history of the first five conferences, including the following topics covered during those conferences:

The theme for the conference, held October 16-17, 1997, at the Defense Systems Management College (DSMC) main campus at Fort Belvoir, Va., was "Reducing Total Ownership Costs — Opportunities and Dilemmas." Over 350 attendees took part in the conference. Following the conference opening by retired Air Force Lt. Gen. Tom Ferguson and a brief welcome by Army Brig. Gen. Richard Black, Com-

- March 1995 — Specifications and Standards, Barriers to Cost Reduction, Cost As an Independent Variable (CAIV), Integrated Product and Process Development (IPPD), Integrated Product Teams (IPT)
- October 1995 — CAIV, IPTs, Acquisition Reform (AR), Acquisition Legislation, Best Practices
- March 1996 — Enhanced Understanding of the Integrated Acquisition Team with special emphasis on the Controller, Requirements/Users, and Contracting/Procurement parts of the Team
- October 1996 — Assess AR Progress, Select Key Focus Areas, Identify Implementation Ideas
- April 1997 — Reducing Total Ownership Costs

Hoeper reminded attendees that, "The 'C' in CAIV is Life Cycle Cost, not just acquisition cost," prior to the first conference panel presentation — "Cost as an Independent Variable (CAIV)."

Panel — CAIV

Dr. Spiros Pallas, Principal Deputy Director of Strategic and Tactical Systems served as the panel's moderator. CAIV was established in December 1995, according to Pallas. Several Flagship Programs (similar to AR Pilot programs) have been established, which fall into two categories: New Starts and Retrofits.

Daniel Porter, who is the Department of Navy Acquisition Reform Executive addressed Navy Strategic Cost Management. He observed that there are not many available CAIV Tools at this time.

Dr. Herbert Fallin, Jr. is the Director of Assessment and Evaluation, Office of the Assistant Secretary of the Army (Research, Development, and Acquisition). The Army's goal, according to Fallin, is to obtain cost reductions of 20 percent.

Air Force Col. Carl "Ben" Overall, Program Director, Intercontinental Ballistic Missile (ICBM) Systems Program Office (SPO) stressed the importance of balancing acquisition and life-cycle costs.

> "...if we can't reduce Total Ownership Costs, we won't just be looking at a list of priorities where we can always afford the top priorities for things we really need. We may find ourselves, in the future, trying to figure out which essentials we can eliminate."

After making individual presentations, the panel fielded questions from the audience. Fallin noted that CAIV was not just about reducing cost, but also achieving the best value. He noted that over 50 percent of total program costs were not from procurement, but were attributable to support costs.

AR Implementation — An Industry Survey

Following the CAIV panel, Charles Adams, Managing Associate at Coopers & Lybrand Consulting addressed "AR Implementation — An Industry Survey." According to Adams, the least implemented AR change element is "Streamlined Government Property Management," while the highest implementation element was the "Use of Past Performance/Best Value Evaluation Criteria" for contracting. The change element with the highest significant outcome result was the use of "Open Systems" approaches.

Adams indicated that the most significant barrier reported was that the "Government decided not to implement" the particular AR change element. In summary, the survey indicates significant progress and impacts for AR initiatives, while indicating a need for continued education and training.

Program Stability

Dan Czelusniak, Director, Acquisition Program Integration, OUSD(A&T), presented a "Program Stability Update." He noted that funding instability fundamentally manifests itself as resource migration. This falls into two categories: investment migration to operations and support (by far, the largest category); and the second type is an internal migration across investment accounts.

According to Czelusniak, there is significant financial risk in the current Future Years Defense Plan; specifically $10 to $12 billion per year. Continuing migration at this level threatens to overwhelm much of the benefits of AR savings. He recommends more realistic planning and programming, noting that efforts to date have only addressed about $2 billion of the $10 to $12 billion-per-year problem.

Internal migration, the second category type, is a program response to technical risks. In an effort to maintain program schedules, program costs increase and destabilize other programs. New starts squeeze out existing programs. Czelusniak's recommendations: manage risk rather than react to it, and establish reserves.

AR Week/ACAT ID IPT Survey Results

Skip Hawthorne, Senior Program Analyst, OUSD(A&T),presented "AR Week/ACAT ID IPT Survey Results." The survey documented that IPT effectiveness is improving over time. Respondents indicated, however, that 20-30 percent of IPTs are not yet working effectively. Too many layers of hierarchy still retard IPT decision maker empowerment.

New DoD Initiative on Sub-tier Competition

Martin Meth, Director, Industrial Capabilities and Assessments, OUSD(A&T), presented "New DoD Initiative on Sub-tier Competition." Meth said recent extensive industry mergers and consolidations have increased vertical integration. The total number of firms has been reduced, but their capabilities have been retained. Studies of specific situations are continuing.

New Attack SSN — Reducing Total Ownership Costs

The luncheon speaker was Katherine Hegmann, Senior Vice President, Navy Systems, at Lockheed Martin Federal Systems. Her presentation, "New Attack SSN — Reducing Total Ownership Costs" highlighted some of the benefits of utilizing Commercial Off-the-Shelf (COTS) software. According to Hegmann, COTS enabled a 4:1 savings in support costs as well as providing reduced program development time.

Panel — Integrating Acquisition and Logistics Throughout the Life Cycle

Dale Adams, Principal Deputy for Acquisition, U.S. Army Materiel Command, served as panel moderator for "Integrating Acquisition and Logistics throughout the Life Cycle."

Bradley Cheney is the Project Leader for the AN/PPS-5 Ground Surveillance Radar System at the U.S. Army Communications-Electronics Command. He developed the concept of upgrading the AN/PPS-5 through non-developmental items (NDI) at one-tenth the cost of replacement systems, while improving system performance. From Research and Development to implementation for his system upgrades took only two years.

Army Col. Stephen Kee, Project Manager for the Apache Attack Helicopter Program noted that it's a challenge to encourage and manage change. Kee said that bad parts are often viewed as merely a supply challenge (i.e., get more, keep those shelves stocked!). He suggested viewing "bad parts" as something that should be fixed to reduce Total Ownership Costs.

Air Force Col. Stan Shinkle is the Program Director for the Predator Unmanned Aerial Vehicle (UAV) Program. This system was fielded "Combat Capable" within 18 months, and avoided 10 years of development costs. Predator's 30-day demo in Bosnia became a two-year operational mission. Shinkle recommends being prepared to be a success. Lack of support, spares, and operators is a result of this

extremely rapid system deployment. He cautions that "Battlelabs" require realistic user expectations.

Roy Willis, Acting Deputy Under Secretary of Defense (Logistics) noted that "If it doesn't break much, it doesn't cost much to own." According to Willis, "One in every three enlisted men is a mechanic." In his view, the two main program cost drivers are "Force Structure" requirements and "Mean Time Between Failure." Placing a stronger up-front emphasis on reliability in new programs and major modifications could pay great dividends in less supply system load and reduced personnel.

Panel — Applying AR to Mods and Upgrades

The next panel, "Applying Acquisition Reform to Mods and Upgrades," was moderated by Navy Capt. Joseph Haddock. He is the Acting Program Executive Officer, Air ASW, Assault and Special Mission Programs.

Navy Capt. Walter Massenburg, Program Manager, Maritime Surveillance Aircraft (PMA-290), presented an overview of a major avionics upgrade to the P-3C aircraft. NDI/COTS were used to the maximum extent possible using IPPD/Integrated Product Teams. He concluded with "Lessons Learned" and stated that Integrated Product Teams do work well when properly managed.

Army Col. Tom Harrison, Program Manager, Utility Helicopter observed that all the Services use Blackhawks, which reduces costs across the board. As "Team Hawk" resulted in commonality going up, costs have come down — at program start, commonality was only 40 percent. To illustrate increased commonality, Harrison displayed a picture of the Blackhawk production line. The shot had several intermixed helicopters, in production, destined for different Services, with civilian versions mixed-in.

Robert McCaig, Technical Director, Lockheed Martin Federal Systems shared his experience with COTS products. Traditionally, COTS products

made up about 10 percent of an acquisition. Current implementation requirements at Lockheed Martin may mandate 75 percent COTS. According to McCaig, modification of COTS components drives up costs and voids the vendor's warranty. He thus noted that, "Off-the-Shelf COTS" is not redundant.

Panel — How Do We Make Evolutionary Acquisition the Norm?

The evening session panel was "How Do We Make Evolutionary Acquisition the Norm?" The panel moderator was Army Lt. Gen. Paul Kern, Military Deputy to the Assistant Secretary of the Army (Research, Development, and Acquisition). Panelists included: Ronald Orr, Assistant Deputy Chief of Staff for Installations and Logistics, Headquarters, U.S. Air Force (HQ USAF); Lee Frame, Deputy Director, Conventional Systems, Office of the Director, Operational Test & Evaluation, HQ USAF; Air Force Lt. Gen. David McCloud, Director for Force Structure, Resources and Assessment, J-8, Joint Staff; Dr. George Schneiter, Director, Strategic and Tactical Systems, Office of the Under Secretary of Defense (Acquisition and Technology) (OUSD[A&T]); Air Force Maj. Gen. Kenneth Israel, Director, Defense Airborne Reconnaissance Office; Irv Blickstein, Assistant Deputy Chief of Naval Operations, Resources, Warfare Requirements, and Assessments; and Dave Welp, President, Raytheon TI Systems, Inc.

The panel discussed the following key issues:

- The definition of evolutionary acquisition is not clear.
- The requirements process should keep the number of key performance parameters to a minimum.
- Use IPTs to prepare mission needs statements and operational requirements documents.
- The longer a program exists, the greater the opportunity for instability.
- Industry often uses a focus on cycle time as the strategic driver. DoD should also?!

Panel — Funding/Investment Challenges

The second day of the conference began with a panel discussion concerning "Funding/Investment Challenges," moderated by Dr. Nancy Spruill, Deputy Director, Acquisition Resources, OUSD(A&T). Panel members included: Alice Maroni, Acting Under Secretary of Defense (Comptroller); Jonathan Etherton, Professional Staff Member to the Senate Armed Services Committee (Majority); Army Maj. Gen. Randall Rigby, Director, Program Analysis and Evaluation Office, Chief of Staff, Army; Navy Rear Adm. Daniel Murphy, Jr., Director, Surface Warfare (N86); Air Force Brig. Gen. Richard Reynolds, Program Executive Officer, Airlift and Trainers; Robert Bott, Vice President, Aircraft and Missile Systems, Boeing/McDonnell Douglas; and John Stenbit, Executive Vice President and General Manager, TRW Systems Integration Group.

The "Funding/Investment Challenges" panel focused on the following key issues:

- Importance of dealing with incentive issues.
- Higher operations and support (O&S) costs versus acquisition costs.
- Importance of setting goals for Life Cycle Cost early.
- Importance of simpler cost accounting.

Keynote Address

Deputy Secretary of Defense Dr. John Hamre delivered the conference keynote address. "It's going to be a tough year...," according to Hamre. He said that there will be no additional money for Congress to add for other programs that are not requested. Hamre asked all PEOs and PMs to work hard at getting their programs priced as properly as possible. Following the keynote address, Hamre presented the Acting Under Secretary of Defense (Acquisition and Technology) (USD[A&T]), R. Noel Longuemare with the David Packard Award for Acquisition Excellence.

Panel — Incentives

Arthur Money, Assistant Secretary of the Air Force for Acquisition served as moderator for the "Incentives" Panel. Panelists were Judy Stokley, System Program Director of the AMRAAM Joint Program Office, Aeronautical Systems Center, Air Force Materiel Command; and Kenneth Brockel, Principal Assistant for Specifications and Standards Acquisition Reform, U.S. Army Communications-Electronics Command.

Judy Stokley presented the AMRAAM story of how Acquisition Reform could be used successfully in an older (18 years) program wherein the Government infrastructure absorbs approximately 50 percent of the program dollars. A "Vision 2000" plan was initiated to show what and how the program picture of today would evolve into in the future. With the future "state" defined, a series of actions were begun; e.g., price-based procurement philosophy, partner with industry, streamline contracts, incentives, etc.

The plans are all in-work and being tracked toward significant results.

Brockel presented the "Value Management Workshop" program plan on Specs and Standards Acquisition Reform (SSAR). These Workshops are designed to show how to apply a Performance Based Philosophy: utilize current technology, use modernization through spares, maximize creativity of IPTs, and rely on the commercial marketplace. Ten Workshops were conducted in fiscal 1997, and 24 are planned for fiscal 1998.

Reduced Maintenance Costs — By Design

The luncheon speaker, Dr. Earl Weener, Director of Systems Engineering, Boeing Commercial Airplanes, presented "Reduced Maintenance Costs — By Design." Examples of Boeing 737 aircraft design changes to lower operational costs included replacing technically advanced composite material engine cowlings with aluminum cowlings.

According to Weener, 737 spares were becoming prohibitively expensive and

lifetime costs were high. Based on the design changes that were incorporated, his company now offers a guaranteed 15-percent maintenance cost reduction, which equals $150,000 savings-per-plane, per year. Weener said actual maintenance cost reductions could be even greater.

SAE Panel

The conference ended with the three Service Acquisition Executives — Dr. Ken Oscar, Acting Army SAE; John Douglass, Navy SAE; Art Money, Air Force SAE — participating in a Question and Answer (Q&A) panel discussion, led by the Acting USD(A&T), R. Noel Longuemare as the session moderator.

Key issues raised through Q&A and discussed by the SAEs follow:

- Research efforts are less focused since cessation of the Cold War.
- Alignment within the OSD and Services on *all* initiatives is needed.
- Accounting changes are needed to provide detail and insights into O&S costs.

In Closing

In closing, Longuemare stated that only three years ago, at the first PEO/SysCom Commanders Conference, cost reduction concepts such as CAIV were still unknown. Today, although all of the concepts of AR are admittedly, still not fully understood or fully implemented, significant progress and benefits have already been attained. Efforts such as this Sixth Semiannual PEO/SysCom Commanders/PM Conference, however, go a long way toward giving defense acquisition leaders better solutions/ options than to "...just stop spending money."

The spring 1998 Defense Systems Affordability Council (DSAC) Seventh PEO/SysCom Commanders/PM Conference has been set for April 28-29, 1998. Conference information and presentations are available at the DSAC Website on the World Wide Web: **http://www.acq.osd.mil/dsac**

Acting Under Secretary of Defense
R. Noel Longuemare Receives Packard Award

On Friday, Oct. 17, Deputy Secretary of Defense John Hamre presented the David Packard Excellence in Acquisition Award to Acting Under Secretary of Defense for Acquisition and Technology, R. Noel Longuemare for his extensive work and success in improving the Department of Defense acquisition corps' efficiency. The award was presented during the semiannual Program Executive Officers/Systems Commanders Conference at Ft. Belvoir, Va.

Photo by Richard Mattox

Longuemare is credited with numerous acquisition reform achievements during his four-year tenure in the Department. His efforts have made Integrated Product Teams a highly effective mode of operation at all levels in defense acquisition; opened new possibilities for cost effectiveness by treating costs as an independent variable; and expanded the application of a performance-based business environment among his many other achievements.

The Packard Award, the Department's highest acquisition award, is named in honor of the late David Packard, a former Deputy Secretary of Defense during the Nixon administration. He was also the co-founder and chairman of the Hewlett-Packard Company and chairman of the President's Blue Ribbon Commission on Defense Management chartered by President Ronald Reagan in 1985. Packard was a strong advocate of excellence in defense acquisition practices. The purpose of the award is to recognize the efforts of Department of Defense civilian and military members, organizations, groups or teams, who have made highly significant contributions which demonstrate exemplary innovation and best acquisition practices.

ACTING UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND TECHNOLOGY, R. NOEL LONGUEMARE (RIGHT) RECEIVES THE DAVID PACKARD EXCELLENCE IN ACQUISITION AWARD FROM DEPUTY SECRETARY OF DEFENSE JOHN HAMRE AT FORT BELVOIR, VA., ON OCTOBER 17. BY LONGUEMARE'S SIDE AT THE AWARD PRESENTATION IS HIS WIFE, JULIE.

Editor's Note: This information is in the public domain and may be accessed from the DefenseLINK News Home Page (**http://www.dtic.dla.mil/defenselink**) on the World Wide Web.

Reducing Total Ownership Cost

FROM LEFT: RETIRED AIR FORCE LT. GEN. THOMAS R. FERGUSON, JR., SENIOR PARTNER, DAYTON AEROSPACE, INC., AND MEMBER, DAU/DSMC BOARD OF VISITORS; DR. JACQUES GANSLER, [THEN] EXECUTIVE VICE PRESIDENT & CHAIRMAN, TASC; DONNA RICHBOURG, ACTING DUSD(AR); RUSSELL SHOREY, CONSULTANT, MELBOURNE, FLA.; R. NOEL LONGUEMARE, ACTING USD(A&T) & CHAIRMAN, DEFENSE SYSTEMS AFFORDABILITY COUNCIL. FERGUSON DELIVERED OPENING REMARKS ON DAY 1 AND ALSO ACTED AS OVERALL CONFERENCE EMCEE. GANSLER WAS CONFIRMED BY THE U.S. SENATE AS USD(A&T) ON NOVEMBER 5, 1997. RICHBOURG DELIVERED THE OPENING REMARKS DURING THE DAY 1 EVENING SESSION. LONGUEMARE ACTED AS MODERATOR OF THE DAY 2 SENIOR EXECUTIVES PANEL AND ALSO PRESENTED THE CONFERENCE SUMMATION AND ACTION ITEMS.

REPRESENTING INDUSTRY, CHARLES ADAMS (LEFT), MANAGING ASSOCIATE AT COOPERS & LYBRAND CONSULTING SPOKE ON "ACQUISITION REFORM: AN INDUSTRY SURVEY." ALSO PICTURED IS RIC SYLVESTER, ACTING ASSISTANT DUSD(SA).

DAN CZELUSNIAK, DIRECTOR, ACQUISITION PROGRAM INTEGRATION, OUSD(A&T) UPDATED THE CONFEREES ON THE SUBJECT OF PROGRAM STABILITY.
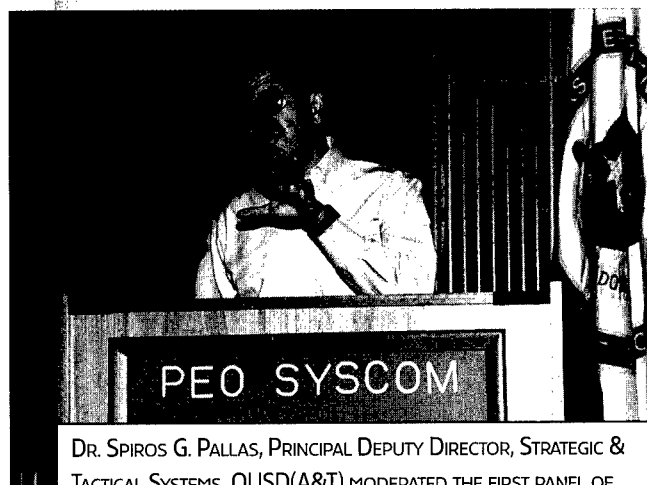
DR. SPIROS G. PALLAS, PRINCIPAL DEPUTY DIRECTOR, STRATEGIC & TACTICAL SYSTEMS, OUSD(A&T) MODERATED THE FIRST PANEL OF THE CONFERENCE — "COST AS AN INDEPENDENT VARIABLE." OTHER PANEL MEMBERS INCLUDED AIR FORCE COL. CARL OVERALL, PROGRAM DIRECTOR/ICBM SYSTEMS PROGRAM OFFICE; DR. HERBERT FALLIN, JR., DIRECTOR, ASSESSMENT & EVALUATION, OASA(RD&A); DANIEL PORTER, NAVY ACQUISITION REFORM EXECUTIVE.
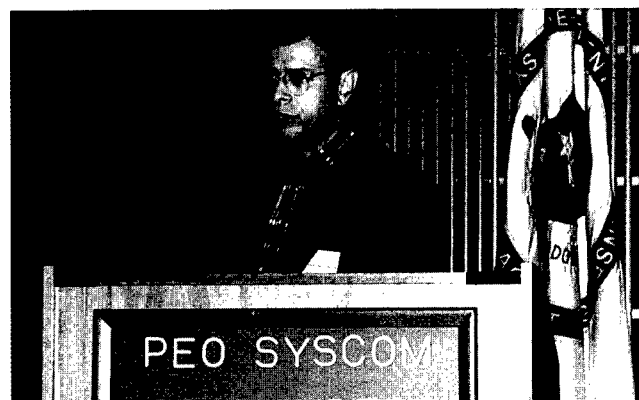
SKIP HAWTHORNE, SPECIAL ASSISTANT TO THE DEPUTY FOR THEATER MISSILE DEFENSE SYSTEMS FOR ACQUISITION PLANNING DISCUSSED ACQUISITION REFORM WEEK AND THE ACAT ID IPT SURVEY RESULTS.
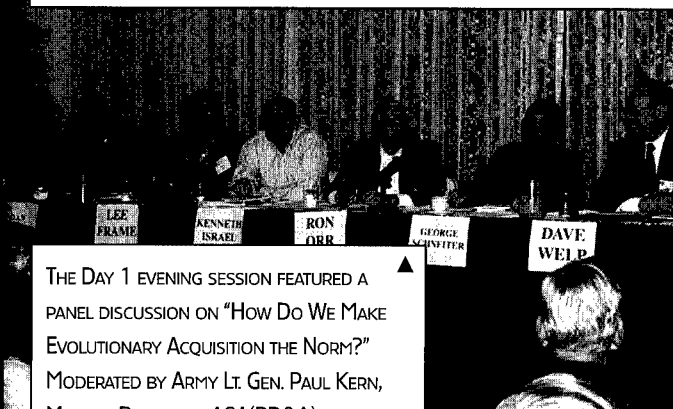
Opportunities and Dilemmas

THE THIRD PANEL CONDUCTED ON DAY 1 OF THE CONFERENCE ADDRESSED THE TOPIC OF APPLYING ACQUISITION REFORM TO MODS AND UPGRADES. MODERATED BY NAVY CAPT. JOSEPH HADDOCK, ACTING PEO, AIR ASW, ASSAULT & SPECIAL MISSION PROGRAMS, OTHER PANEL MEMBERS INCLUDED, FROM LEFT: ARMY COL. THOMAS HARRISON, PROJECT MANAGER, UTILITY HELICOPTERS; ROBERT McCAIG, TECHNICAL DIRECTOR, LOCKHEED MARTIN FEDERAL SYSTEMS; NAVY CAPT. WALTER MASSENBURG, PROGRAM MANAGER, MARITIME SURVEILLANCE AIRCRAFT, HADDOCK.

THE DAY 1 EVENING SESSION FEATURED A PANEL DISCUSSION ON "HOW DO WE MAKE EVOLUTIONARY ACQUISITION THE NORM?" MODERATED BY ARMY LT. GEN. PAUL KERN, MILITARY DEPUTY TO ASA(RD&A), OTHER PANEL MEMBERS INCLUDED, FROM LEFT: IRV BLICKSTEIN, ASSISTANT DEPUTY CHIEF OF NAVAL OPERATIONS, RESOURCES, WARFARE REQUIREMENTS & ASSESSMENTS; NAVY REAR ADM. DAN BOWLER, DEPUTY DIRECTOR, FORCE STRUCTURE & RESOURCES, J8/JCS; LEE FRAME, DEPUTY DIRECTOR, CONVENTIONAL SYSTEMS, ODOT&E; AIR FORCE LT. GEN. KENNETH ISRAEL, ADUSD (AIRBORNE RECONNAISSANCE) & DIRECTOR, DARO; RON ORR, ASSISTANT DEPUTY CHIEF OF STAFF, INSTALLATIONS & LOGISTICS, HQ USAF; DR. GEORGE SCHNEITER, DIRECTOR, STRATEGIC & TACTICAL SYSTEMS, OUSD(A&T); DAVE WELP, PRESIDENT, RAYTHEON TI SYSTEMS, INC.

DAY 2 BEGAN WITH A PANEL ON "FUNDING/INVESTMENT CHALLENGES." MODERATED BY DR. NANCY SPRUILL, DEPUTY DIRECTOR FOR ACQUISITION RESOURCES, OUSD(A&T), PANEL MEMBERS INCLUDED, FROM LEFT: SPRUILL; JONATHAN ETHERTON, PROFESSIONAL STAFF MEMBER TO THE SENATE ARMED SERVICES COMMITTEE (MAJORITY) ON ACQUISITION REFORM; ALICE MARONI, ACTING USD (COMPTROLLER); ARMY MAJ. GEN. RANDALL RIGBY, DIRECTOR, PROGRAM ANALYSIS & EVALUATION OFFICE, OFFICE OF THE ARMY CHIEF OF STAFF; NAVY REAR ADM. DANIEL MURPHY, JR., DIRECTOR, SURFACE WARFARE, DON; AIR FORCE BRIG. GEN. RICHARD REYNOLDS, AIR FORCE PEO/AIRLIFT AND TRAINERS, HQ USAF; BOB BOTT, VICE PRESIDENT, AIRCRAFT & MISSILE SYSTEMS, BOEING/McDONNELL DOUGLAS; JOHN STENBIT, EXECUTIVE VICE PRESIDENT & GENERAL MANAGER, TRW SYSTEMS INTEGRATION GROUP.

MARTIN METH, DIRECTOR, INDUSTRIAL CAPABILITIES AND ASSESSMENTS, ODUSD (INDUSTRIAL AFFAIRS & INSTALLATIONS) PRESENTED AN OVERVIEW OF A NEW DoD INITIATIVE — SUB-TIER COMPETITION.

Continued...

THE SECOND PANEL OF DAY 1, MODERATED BY DALE ADAMS, PRIN-
CIPAL DEPUTY FOR ACQUISITION, HQ AMC FOCUSED ON THE TOPIC
OF "INTEGRATING ACQUISITION AND LOGISTICS THROUGHOUT THE LIFE
CYCLE." OTHER PANEL MEMBERS INCLUDED, FROM LEFT: LARRY HILL,
CHIEF, INTEGRATED LOGISTICS SUPPORT BRANCH, ODCSLOG,
HQDA; AIR FORCE COL. STAN SHINKLE, DEPUTY DIVISION CHIEF,
SPECIAL PROJECTS DIVISION, RECONNAISSANCE & AVIONICS SYS-
TEMS GROUP, ASC/AFMC; ARMY COL. STEPHEN KEE, PROJECT
MANAGER, APACHE ATTACK HELICOPTER PROGRAM; BRAD CHENEY,
ARMY PROJECT LEADER, AN/PPS-5 GROUND SURVEILLANCE
RADAR; ROY WILLIS, ACTING DUSD(L); ADAMS.

THE LUNCHEON SPEAKER ON DAY 1, KATHERINE C. HEGMANN, SENIOR VICE
PRESIDENT, NAVY SYSTEMS, LOCKHEED MARTIN FEDERAL SYSTEMS, SPOKE ON
THE "NEW ATTACK SSN: REDUCING TOTAL OWNERSHIP COSTS."
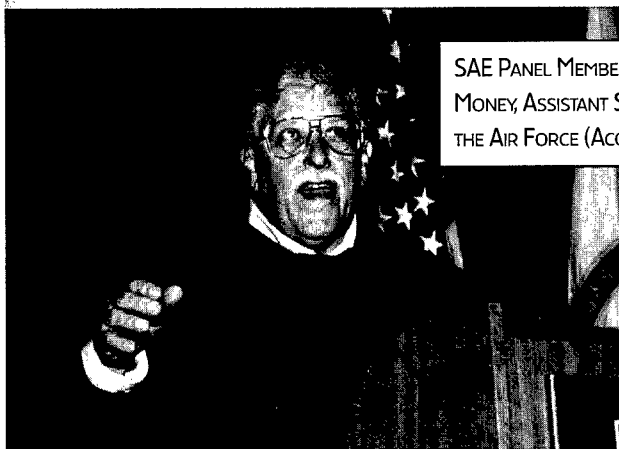
SAE PANEL MEMBER — ART
MONEY, ASSISTANT SECRETARY OF
THE AIR FORCE (ACQUISITION).

DEPUTY SECRETARY OF DEFENSE JOHN HAMRE WAS THE CONFERENCE
KEYNOTE SPEAKER. HAMRE FOCUSED ON FUNDING MIGRATION.

FOLLOWING THE DAY 1 OPENING REMARKS, PAUL J. HOEPER,
DUSD (INTERNATIONAL AND COMMERCIAL PROGRAMS) PRE-
SENTED THE CONFERENCE THEME AND OBJECTIVES.
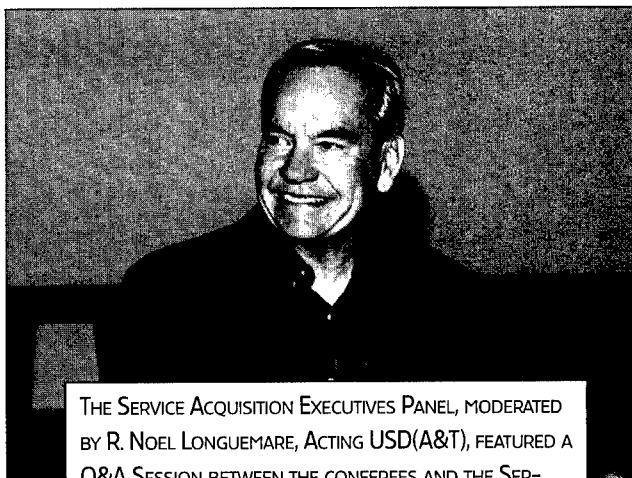
THE SERVICE ACQUISITION EXECUTIVES PANEL, MODERATED
BY R. NOEL LONGUEMARE, ACTING USD(A&T), FEATURED A
Q&A SESSION BETWEEN THE CONFEREES AND THE SER-
VICES' TOP ACQUISITION OFFICIALS.
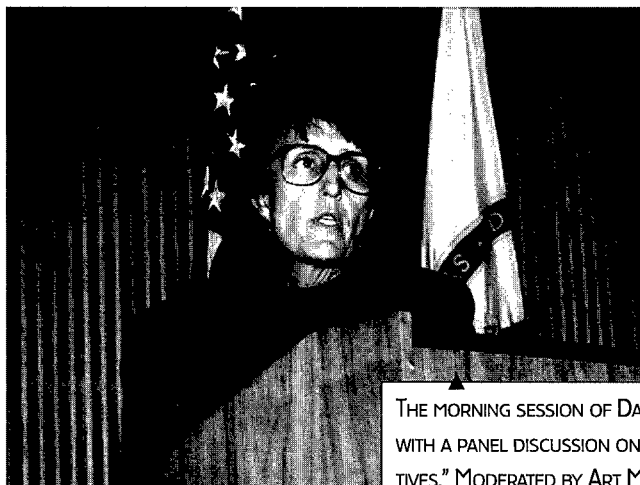
THE MORNING SESSION OF DAY 2 ENDED WITH A PANEL DISCUSSION ON "INCENTIVES." MODERATED BY ART MONEY, ASSISTANT SECRETARY OF THE AIR FORCE (ACQUISITION), OTHER PANEL MEMBERS INCLUDED JUDY STOKLEY, SYSTEM PROGRAM DIRECTOR, AMRAAM JOINT PROGRAM OFFICE, ASC/AFMC; AND KENNETH BROCKEL, PRINCIPAL ASSISTANT FOR SPECIFICATIONS AND STANDARDS ACQUISITION REFORM, U.S. ARMY COMMUNICATIONS-ELECTRONICS COMMAND.
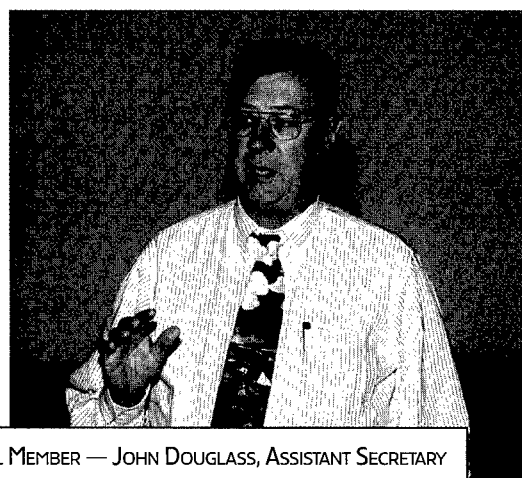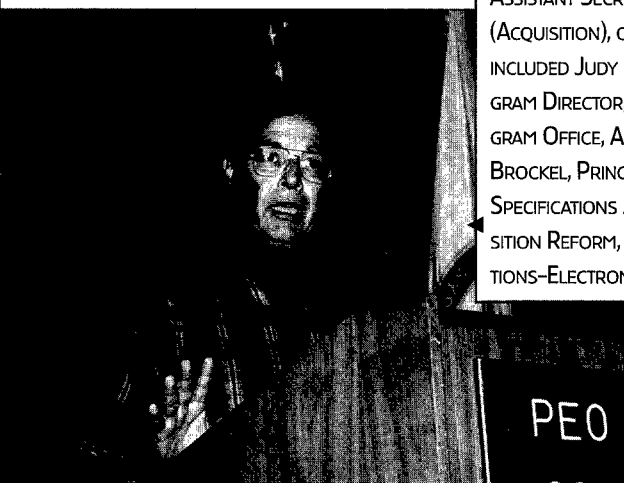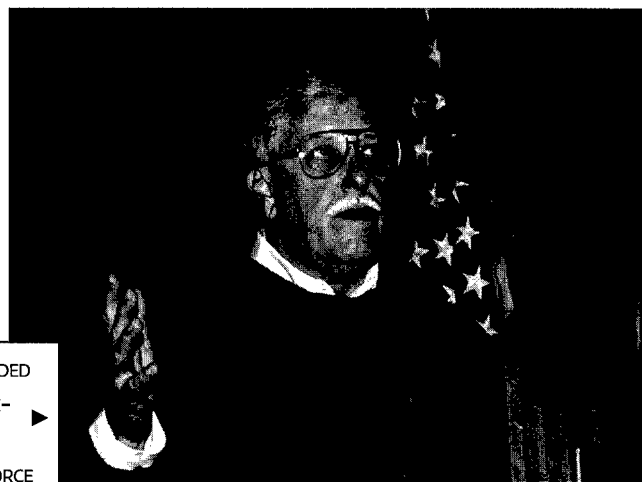

SAE PANEL MEMBER — JOHN DOUGLASS, ASSISTANT SECRETARY OF THE NAVY (RESEARCH, DEVELOPMENT, & ACQUISITION).

SAE PANEL MEMBER — DR. KENNETH OSCAR, ACTING ASSISTANT SECRETARY OF THE ARMY (RESEARCH, DEVELOPMENT, & ACQUISITION).
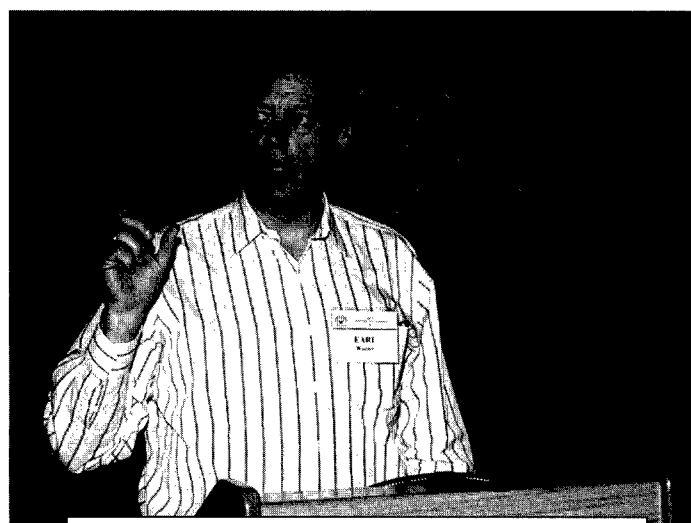
THE DAY 2 LUNCHEON SPEAKER, DR. EARL WEENER, DIRECTOR OF SYSTEMS ENGINEERING, BOEING COMMERCIAL AIRPLANES, ADDRESSED THE CONFEREES ON "REDUCED MAINTENANCE COSTS — BY DESIGN."
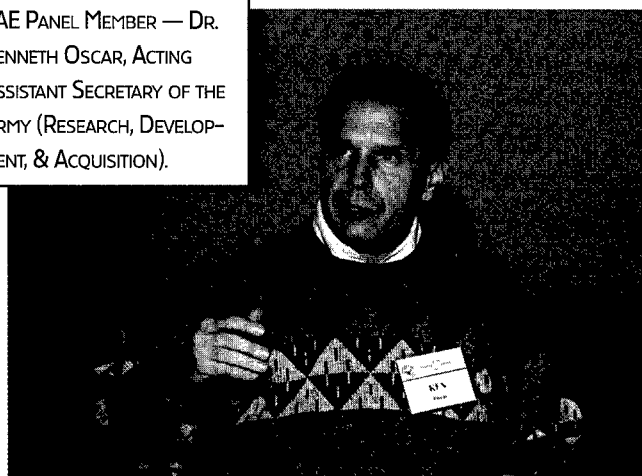
ARE WE HAVING FUN YET?

I f you think acquisition is a staid, dry profession, staffed by stuffy bureaucrats and humorless, no-nonsense types, these photos will prove you wrong. Check out this page to see who managed to enjoy the two-day Sixth Semiannual PEO/SysCom Commanders/PEO Conference, held at Fort Belvoir, Va., October 16-17, 1997.

DEPUTY SECRETARY OF DEFENSE JOHN HAMRE.
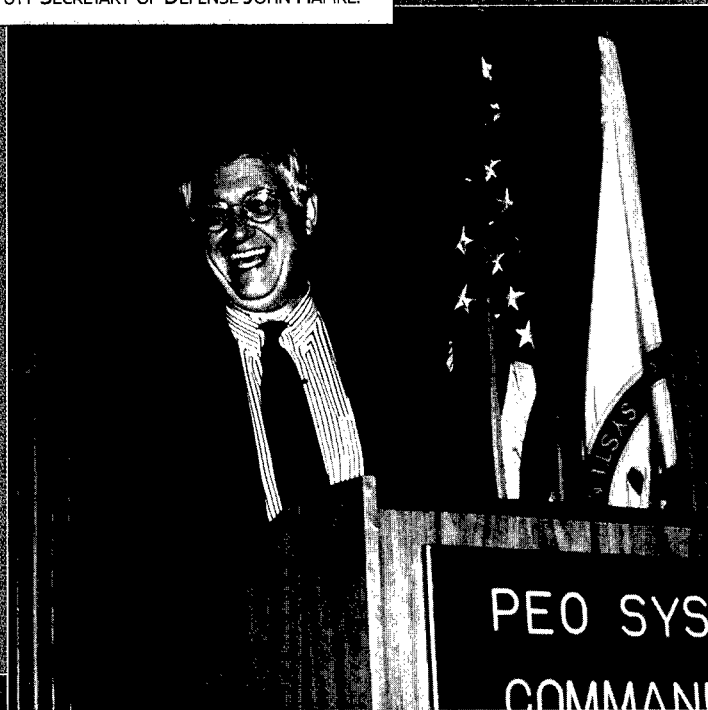
KATHERINE C. HEGMANN, SENIOR VICE PRESIDENT, NAVY SYSTEMS, LOCKHEED MARTIN FEDERAL SYSTEMS; GEORGE KRIKORIAN, INDUSTRY CHAIR, DSMC EXECUTIVE INSTITUTE.
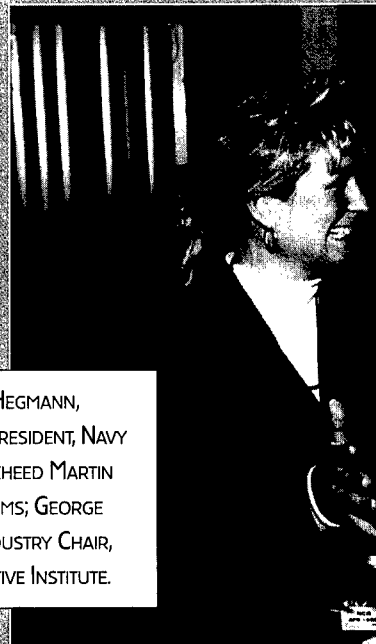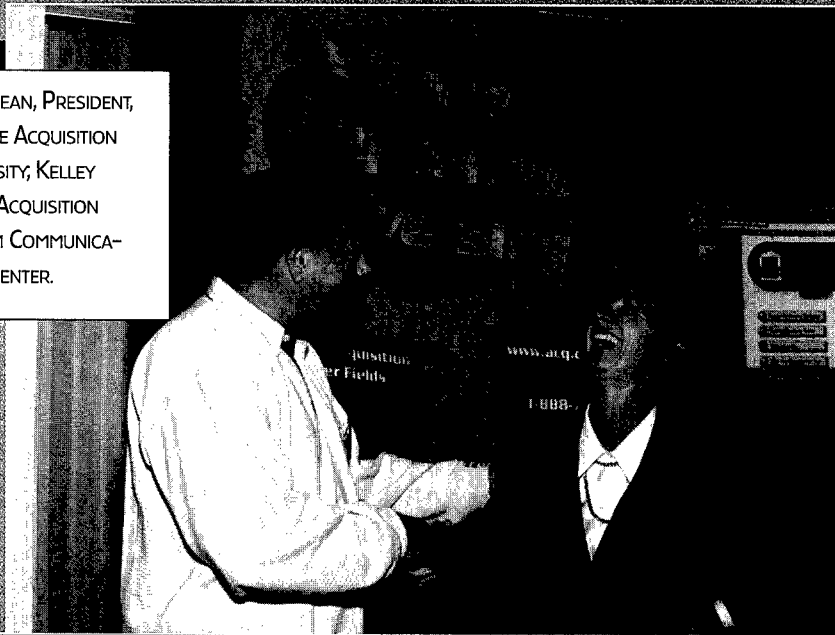
LATONYA JACKSON, EXECU-TIVE BUSINESS MANAGER, HQ CECOM; KENNETH BROCKEL, PRINCIPAL ASSIS-TANT FOR SPECIFICATIONS & STANDARDS, ACQUISITION REFORM, HQ CECOM.
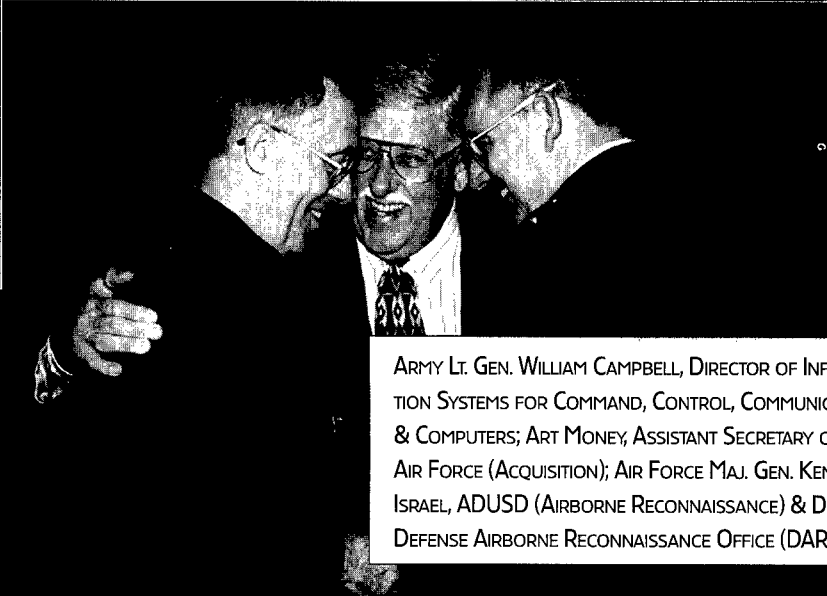
MEMBERS OF AN EVENING SESSION PANEL DISCUSSION ON "HOW DO WE MAKE EVOLUTION-ARY ACQUISITION THE NORM?"

Photos by Richard Mattox & Army Sgt. Richard Vigue

TOM CREAN, PRESIDENT,
DEFENSE ACQUISITION
UNIVERSITY; KELLEY
BERTA, ACQUISITION
REFORM COMMUNICA-
TIONS CENTER.

ARMY LT. GEN. WILLIAM CAMPBELL, DIRECTOR OF INFORMA-
TION SYSTEMS FOR COMMAND, CONTROL, COMMUNICATIONS,
& COMPUTERS; ART MONEY, ASSISTANT SECRETARY OF THE
AIR FORCE (ACQUISITION); AIR FORCE MAJ. GEN. KENNETH
ISRAEL, ADUSD (AIRBORNE RECONNAISSANCE) & DIRECTOR,
DEFENSE AIRBORNE RECONNAISSANCE OFFICE (DARO).
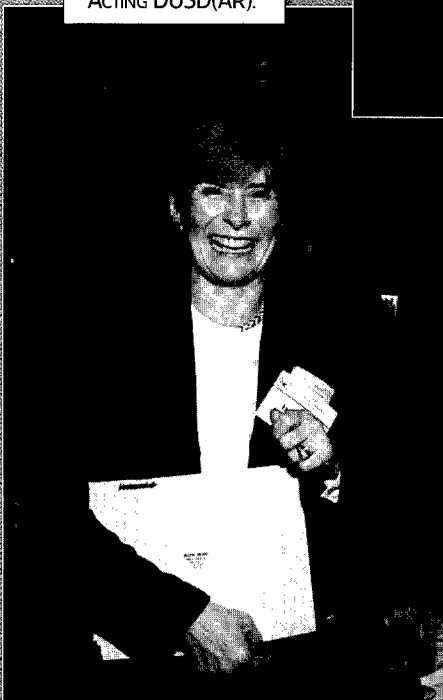
DONNA RICHBOURG,
ACTING DUSD(AR).

MARTIN METH, DIRECTOR, INDUSTRIAL
CAPABILITIES AND ASSESSMENTS,
ODUSD (INDUSTRIAL AFFAIRS &
INSTALLATIONS).

PEO SYSCOM
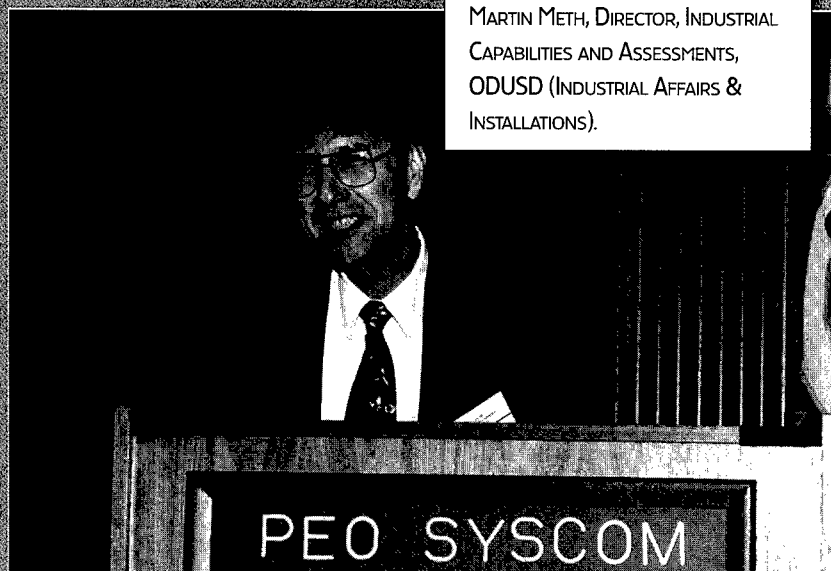
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Average Number of Copies Each Issue During Preceding 12 Months

A.	Total number of copies printed (net press run):	24,450
B.	Paid and/or requested circulation:	
	1 Sales through dealers and carriers, street vendors, and counter sales:	1,116
	2. Mail subscriptions paid and/or requested:	23,000
C.	Total paid and/or requested circulation:	24,116
D.	Free distribution by mail, carrier or other means, samples, complimentary and other free copies:	300
E.	Total distribution:	24,416
F.	Copies not distributed:	
	1. Office use, leftover, unaccounted, spoiled after printing:	34
	2. Returns from news agents:	None
G.	Total distribution:	24,450

Actual Number Of Copies Each Single Issue Published Nearest To Filing Date

A.	Total number of copies printed (net press run):	26,116
B.	Paid and/or requested circulation:	
	1. Sales through dealers and carriers, street vendors, and counter sales:	1,116
	2. Mail subscriptions paid and/or requested:	23,000
C.	Total paid and/or requested circulation:	24,116
D.	Free distribution by mail, carrier or other means, samples, complimentary and other free copies:	1,850
E.	Total distribution:	25,966
F.	Copies not distributed:	
	1. Office use, leftover, unaccounted, spoiled after printing:	150
	2. Returns from news agents:	None
G.	Total distribution:	26,116

ACQUISITION REFORM

An Internet Listing Tailored to the Professional Acquisition Workforce

Surfing the Net

DEPARTMENT OF DEFENSE

Under Secretary of Defense (Acquisition and Technology) (USD[A&T])
http://www.acq.osd.mil/HomePage.html
Helps locate a specific office or USD(A&T) document.

Deputy Under Secretary of Defense (Acquisition Reform) (DUSD[AR])
http://www.acq.osd.mil/ar
Information on upcoming events, legislation, and DUSD(AR) organizational breakout. "Ask A Professor" link allows users to ask questions and receive responses within 10 business days.

Acquisition Systems Management (Defense Acquisition Board [DAB] Executive Secretary)
http://www.acq.osd.mil/api/asm/
Information on organization, mission, products, customers, and Frequently Asked Questions (FAQ).

DoD Acquisition Workforce Home Page
http://www.dtic.mil/acqed2/acqed.html
Current legislation, regulations, critical acquisition positions, and FAQs for the acquisition workforce.

Defense Acquisition Deskbook
http://www.deskbook.osd.mil
Automated acquisition reference tool covering mandatory and discretionary practices as well as procurement wisdom.

Defense Acquisition University (DAU) and Acquisition Reform Communications Center (ARCC)
http://www.acq.osd.mil/dau
DAU course and schedule information; consortium school links; acquisition documents and publications. ARCC provides Acquisition Reform training information and materials.

Army Acquisition Corps (AAC)
http://www.dacm.sarda.army.mil
News; policy; publications; training opportunities.

Army Contracting
http://www.acqnet.sarda.army.mil
Policy; library of documentation; newsletters; training opportunities.

Navy Acquisition Reform
http://www.acq-ref.navy.mil/
Policy and guidance; resource lists; tools; training opportunities.

Air Force (Contracting)
http://www.hq.af.mil/SAFAQ/contracting/
Business opportunities with the Air Force; various training options; library of publications.

Air Force (Acquisition)
http://www.safaq.hq.af.mil/
Shop Talk; "Ask AQ" and receive answers within two business days.

Air Force Materiel Command (AFMC) Contracting Laboratory's Federal Acquisition Regulation (FAR) Site
http://www.farsite.hill.af.mil/
FAR search tool; information on open FAR and Defense Federal Acquisition Regulation (DFAR) cases; Federal Register; *Commerce Business Daily* Announcements; Electronic Forms Library.

HQ AFMC/PK Training
http://www.afmc.wpafb.af.mil/
Access "Organizations," "PK Contracting," "PKX, Resource Management," and "Training" to obtain Air Force training references, tools, guidebook, and link to Lightning Bolt No. 9 Training.

HQ Air Combat Command — Contracting Division
http://www.acclog.af.mil/lgc/lgc.htm
Policy guidance and technical assistance in areas such as: performance measurement; operational contracting; International Merchant Purchase Authorization Card; commercial practices; outsourcing.

Centralized Request for Proposal (RFP) Support Team Office
http://www.crfpst.wpafb.af.mil/
Acquisition Strategy Panel (ASP) Secretariat; Lightning Bolt information; announcements and events; sample documents and more!

Defense Advanced Research Projects Agency (DARPA)
http://www.arpa.mil
Planned procurement examples available for downloading.

Defense Information Systems Agency (DISA)
http://www.disa.mil
Structure and mission of DISA; products and services; contracting opportunities.

Defense Systems Management College (DSMC)
http://www.dsmc.dsm.mil
DSMC educational products and services.

National Imagery and Mapping Agency (NIMA) [Formerly Defense Mapping Agency (DMA)]
http://www.nima.mil
Geospatial and imagery information; publications; business opportunities.

Defense Modeling and Simulation Office (DMSO)
http://www.dmso.mil
Focal point for information concerning DMSO activities.

Defense Technical Information Center (DTIC)
http://www.dtic.mil/
Information on planned, ongoing, and completed defense-related research.

DoD Electronic Commerce/Electronic Data Interchange Office (EC/EDI)
http://www.acq.osd.mil/ec/
Information on Central Control Register; Value Added Networks; current EDI sites; online resources.

Open Systems Joint Task Force
http://www.acq.osd.mil/osjtf
Open Systems education and training opportunities; standards selection; documentation; key briefings; evidence of benefits.

Government Education and Training Network (GETN) (For Department of Defense Only)
http://www.afit.af.mil/Schools/DL/schedule.htm
Schedule of distance learning opportunities.

Government-Industry Data Exchange Program (GIDEP)
http://www.gidep.corona.navy.mil
Information on non-conforming products; diminishing manufacturing sources; engineering; metrology; reliability-maintainability for better readiness and reduced costs.

ACQUISITION REFORM

An Internet Listing Tailored to the Professional Acquisition Workforce

Surfing the Net

DoD Acquisition Workforce Personnel Demonstration Project
http://www.crfpst.wpafb.af.mil/demo/home-page.html
Information on the demonstration project, including documents, FAQs, and related sites.

FEDERAL CIVILIAN AGENCIES

ARNET (Joint Effort of the National Performance Review and Office of Federal Procurement Policy)
http://www.arnet.gov/
Virtual library; procurement resources; best practices; business opportunities.

Federal Acquisition Institute (FAI)
http://www.gsa.gov/staff/v/training.htm
One-stop acquisition training shop; Federal Acquisition Streamlining Act resource materials; FAR; Federal Acquisition Reform Act.

Federal Acquisition Jump Station
http://procure.msfc.nasa.gov/fedproc/home.html
Procurement and acquisition servers by contracting activity; CBDNet; Reference Library; Small Business Assistance; Electronic Commerce; Streamlining.

General Accounting Office (GAO)
http://www.gao.gov
Investigative arm of Congress; examines matters relating to the receipt and disbursement of public funds. Allows users access to GAO reports, FAQs.

General Services Administration (GSA)
http://www.gsa.gov
Online shopping for commercial items to support government interests.

Library of Congress
http://www.loc.gov
List of public laws; legislation; vetoed bills; Congressional Internet services.

National Performance Review (NPR)
http://www.npr.gov/
Government cost-savings advice; "how to" tools.

National Technical Information Service (NTIS)
http://www.fedworld.gov/preview/preview.html
Check out OrderNow for online products.

Small Business Administration (SBA)
http://www.SBAonline.SBA.gov
Communications network for small businesses.

U.S. Coast Guard
http://www.dot.gov/dotinfo/uscg/welcome.html
General Coast Guard information.

INDUSTRY AND PROFESSIONAL ORGANIZATIONS

Aerospace Industries Association
http://www.access.digex.net
Information about the most critical issues facing today's U.S. aerospace industry and access to related Internet sites.

Commerce Business Daily
http://www.govcon.com/
Access to current and back issues with search capabilities; business opportunities; interactive yellow pages.

Consortium for Advanced Manufacturing—International
http://www.onramp.net/cami
Activities of this non-profit manufacturing research organization include activity-based costing and activity-based management.

Electronic Industries Association (EIA)
http://www.eia.org
Government Relations Department includes links to issue councils.

National Contract Management Association (NCMA)
http://www.ncmahq.org
"What's New in Contracting?"; educational products catalog.

Society of Logistics Engineers (SOLE)
http://www.sole.org/
Online desk references that link to advice in solving logistics problems.

TOPICAL LISTINGS

ACQWEB Index of Offices by Title
http://www.acq.osd.mil/acqweb/topindex.html
Great launch pad to acquisition specific sites and topics.

DoD Specifications and Standards Home Page
http://www.acq.osd.mil/es/std/stdhome.html
Military standards and specifications reform; FAQs; key POCs; standardization library (newsletters, policy memos, and other documents); training, seminars and conferences; commercial and nondevelopmental item programs.

Earned Value Management
http://www.acq.osd.mil/pm
Information on implementation of Earned Value Management; latest policy changes; standards; international developments; active noteboard.

Fedworld Information
http://www.fedworld.gov
A comprehensive central access point for searching, locating, ordering, and acquiring government and business information.

GSA Advantage
http://www.fss.gsa.gov
Assistance in using the government-wide purchase card.

Single Process Initiative (SPI) Information
http://www.dcmc.dcrb.dla.mil
SPI policy, guidance, procedures; information sheets; lessons learned.

If you have questions about the above sources, or would like to add your Website to this list, please call the Acquisition Reform Communications Center (ARCC) at 1-888-747-ARCC. DAU encourages the reciprocal linking of its Home Page to other interested agencies. Contact the DAU Webmaster at: **dau_webmaster@acq.osd.mil**

DATES
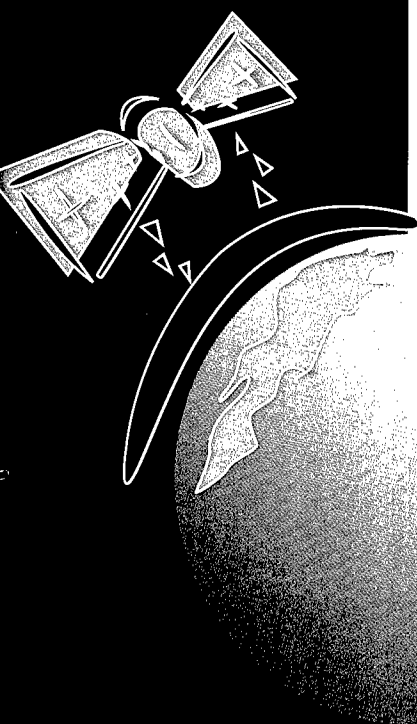
TOPICS

Dates	Topics
January 28, 1998	FAR Part 15 (Review)
February 3, 1998	Oral Presentations
February 11, 1998	Past Performance in Source Selection
May 6, 1998	Information Technology Contracting (ITK)

The Defense Acquisition University's Home Page on the World Wide Web offers further information on Acquisition Reform Satellite Broadcasts. Access **http://www.acq.osd.mil/dau/arcc/** *for the title of each broadcast, time, frequency, description, technical specifications, broadcast support document, and broadcast evaluation document. Users can also call the Acquisition Reform Communications Center for the latest information on Acquisition Reform Satellite Broadcasts:* **1-888-747-ARCC (Toll Free).**

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If this is your first issue of *Program Manager*, you may have received it as a complimentary copy, as part of our ongoing efforts to disseminate the latest acquisition reform news, policies, and legislative updates, to even more members of the acquisition workforce.

To subscribe, government personnel may simply fill out the card in the center of the magazine or submit a written request on official stationery, using their business address, to the address shown below. Government personnel may also telefax their written requests to (703) 805–2917 or DSN 655–2917.

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NOMINATIONS CONFIRMED — EXCERPT

This document identifies nominations confirmed or rejected by the Senate, or withdrawn by the President, during the past week.

The following Executive Nominations were confirmed by the Senate during the past week. Nominations flagged with an asterisk were approved subject to the nominee's commitment to respond to requests to appear and testify before any duly constituted committee of the Senate.

November 5, 1997

PN554*   DEPARTMENT OF DEFENSE

Jacques Gansler, of Virginia, to be Under Secretary of Defense for Acquisition and Technology.

Editor's Note: This information is in the public domain and is an excerpt of "Senate Nominations Confirmed" for November 5, 1997, on the U.S. Senate Home Page. It may be accessed at **http://www. senate.gov/activities/noms-cnf.html** on the World Wide Web.